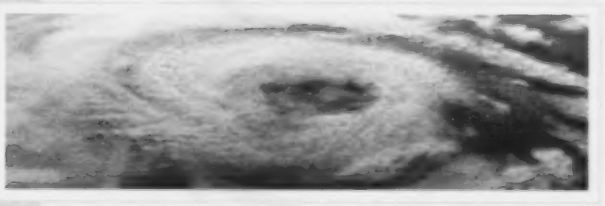
Office of the Auditor General of Ontario

Annual Report 2016



Volume 1 of 2

Office of the Auditor General of Ontario

To the Honourable Speaker
of the Legislative Assembly

In my capacity as the Auditor General, I am pleased to submit to you Volume 1 of the *2016 Annual Report* of the Office of the Auditor General of Ontario to lay before the Assembly in accordance with the provisions of section 12 of the *Auditor General Act*.

Bonnie Lysyk
Auditor General

Fall 2016
Toronto, Ontario

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Bonnie Lysyk
Auditor General of Ontario

Reflections

Introduction

This Annual Report, my fourth as the Auditor General of Ontario, is important for several reasons.

First, our value-for-money audits this year provide Members of the Legislative Assembly and the general public with insight into four key areas—health care, mental-health care, the environment, and construction of roads and public transit—that touch the life of nearly every Ontarian. Together with our other value-for-money audits of general government procurement, and employment and training, the areas that we have audited account for billions of dollars of provincial spending.

Second, this Report addresses an important, albeit complex, aspect of the province's finances pertaining to the government's accounting treatment of jointly sponsored public-sector pension plans. This is addressed in detail in **Chapters 2** and **4** of **Volume 1** of the Annual Report.

Third, we are for the first time issuing our Annual Report in two volumes:

- **Volume 1** contains our examination of the public accounts of the province, our value-for-money audits, our continuing analysis of specific matters relevant to achieving better accountability, our review of government advertising, our Office operations, and a discussion on a variety of other matters. As a point of interest, we are publishing one-page summaries of each value-for-money audit report and certain other sections of this Report on our website this year.
- **Volume 2** contains follow-up reports on our 2014 audits, follow-ups on three of our special reports issued between 2012 and 2015, and follow-ups on the recommendations contained in reports tabled during the last year by the Legislative Assembly's all-party Standing Committee on Public Accounts. These Committee reports were written following hearings on matters covered in previous Annual Reports.

Finally, we established an audit team to focus on information technology (IT) audits in the public and broader public sectors, and to provide internal IT support to our value-for-money and financial-statement audit teams. This year **Chapter 4** of **Volume 1** also includes a short report that sets the stage for future IT audit work to be conducted by my Office.

Over the past year, I have been grateful for the support of the members of the all-party Standing Committee on Public Accounts. I also want to thank the staff of my Office for their outstanding work and contributions to this Report, and I want to highlight the continuing co-operation and assistance of senior officials and staff in the public and broader public sectors.

Public Accounts and the Government's Accounting Treatment of Public-Sector Pensions

For the first time in the 23 years since the Province adopted Canadian generally accepted accounting standards for governments, the government received a qualified audit opinion on the Province's consolidated financial statements. This was the result of the government's accounting treatment of pension assets of two pension funds it co-sponsors with teachers and public servants.

We take the view, supported by standards of the Public Sector Accounting Board, that the government cannot include these co-sponsored assets in its statements because it has no legal, regulatory or contractual right to make use of the assets without first securing the agreement of each pension plan's joint sponsor.

The government adjusted its 2015/16 consolidated financial statements to reflect this position, but did not restate the 2014/15 comparative figures to reflect that this treatment also applies to prior years. As a result, as required under Canadian Auditing Standards, I qualified my audit opinion because users of the financial statements could not make a valid comparison of this year's statements to last year's.

For those seeking to better understand the issue, we have included a more detailed discussion of the accounting treatment of pension plans in **Chapter 4** of **Volume 1**.

Still with the Public Accounts, in **Chapter 2** of **Volume 1**, we reiterate the view expressed in previous Annual Reports that, with respect to the Province's debt burden, the government should provide legislators and the public with long-term targets for addressing the current and projected debt. We also continue to caution against using legislated accounting treatments instead of following Canadian generally accepted accounting standards.

Value-for-Money Audits

In reviewing the results of our audits this year, a few common themes stand out: funding models need to be reviewed to ensure funding is provided based on needs rather than on historical funding patterns; better information is required for decision-making; some services need to be timelier; greater transparency through improved public reporting is needed; and ministries need to conduct more analysis of underlying issues to better understand and address them.

However, it is the concept of "shared responsibilities" for service delivery and capital projects in the public and broader public sectors that stands out. This concept also extends to the roles of government, ministries, agencies, for-profit and not-for-profit organizations, and other stakeholders in protecting our environment.

Shared Responsibilities for Service Delivery and Capital Projects

During our audits this year, the public servants with whom we dealt were clearly passionate about delivering services and capital projects to the public in the best way possible, in accordance with legislation and within allocated budgets. This passion for making a difference is what draws many people to work in the public and broader public sectors.

As time has passed and the public sector has evolved in Ontario, decision-making about how services and capital projects are actually delivered does not always rest directly and solely with ministries or broader-public-sector entities. Many non-government service providers, such as for-profit and not-for-profit organizations, physicians, contractors and suppliers (and their associations) are starting to play bigger roles in how and when services are provided and capital projects are delivered. This was a common thread in the majority of our audits this year. The involvement of these groups is necessary and positive, and they bring knowledge, expertise and experience to the table.

However, what has not changed, and will likely not change in the near future, is that the public continues to hold government, ministries and the broader-public-sector entities accountable when the delivery of service is unsatisfactory, or when value for money is not achieved. As such, staff in the ministries and the broader public sector have difficult decisions to make in order to maintain positive relationships with service providers and their associations, while at the same time holding them to account for the economical, efficient and effective use of public money. Responsibilities for ensuring value for money are increasingly becoming shared responsibilities.

Given that ultimate accountability still rests with government, ministries and the broader public sector, we believe there is still a strong need for staff within the public and broader public sectors to be able to make appropriate difficult decisions and take appropriate difficult actions in the best interest of taxpayers—even when doing so may not always align with the views of their service providers. During some of this year's audits, we saw constraints on, or hesitation by, public servants because of concerns about the impact some decisions and actions could have on relationships with service providers.

Shared Responsibilities Still Require Oversight

When used in the same sentence as "public sector," the terms "oversight" and "accountability" in some people's minds have the same meaning as "excessive bureaucracy." As a consequence, it seems to us that ministries and broader-public-sector entities may not accept ownership of a program, or may be unable or reluctant to conduct the oversight and monitoring necessary to ensure that programs are delivered efficiently and cost-effectively, because this work may be viewed as "excessively bureaucratic." Excessive bureaucracy has existed, and likely still exists to some extent, in all governments. However, this should not be confused with "appropriate oversight." Many publicly funded services that touch Ontarians are being delivered, as previously mentioned, by many service providers throughout the province, where the public still ultimately holds government accountable to make sure that they are delivered in a timely, efficient and effective way. Appropriate oversight is essential to ensure this happens. This point arose in most of the audits we conducted this year.

Shared Responsibilities to Protect the Environment

Three of our audits this year address the environment and touch on shared responsibilities. Government, ministries, the broader public sector, not-for-profit and for-profit organizations and the general public all contribute to the condition of our physical environment. Ultimately, the public expects appropriate public consultation, effective government oversight of operations affecting the environment, and assurance that decisions affecting Ontarians and their environment take into account their health, finances and overall well-being.

Health Care

This year, we performed value-for-money audits on some important areas in this sector—**Large Community Hospital Operations**, **Physician Billing**, and **Electronic Health Records' Implementation Status**.

Every resident of the province will at one time or another come into contact with the health-care system, and the budget of the Ministry of Health and Long-Term Care (Ministry) reflects this, accounting for 40 cents of every dollar the province spends.

Considering that the province has a population of more than 13 million, I believe the Ministry and its health-care partners generally do a good job of providing care in the vast majority of cases. However, this is one sector where any kind of subpar performance can have critical—and sometimes tragic—consequences.

One overriding issue relates to the growing number of seniors requiring a wide range of health services. Demographers have warned for decades that aging baby boomers will be making increasingly heavy demands on the health-care system, but government planning has thus far not fully addressed the need for more long-term-care homes and other facilities necessary to relieve the strain on hospitals.

Large Community Hospital Operations

In 2015/16, Ontario's 57 large community hospitals, which account for almost half of the province's 31,000 publicly funded hospital beds, recorded 4.3 million visits to emergency rooms and performed 1.07 million surgical procedures. Funding to all large community hospitals accounted for about $7.89 billion, or 46% of the $17 billion spent on 147 public hospitals in Ontario in 2015/16.

Our audit found that nine out of 10 patients treated in the emergency rooms of the three large community hospitals we visited typically received timely care, and left the hospital within about three hours. However, the one in 10 with conditions serious enough to warrant admission to hospital waited longer than would be expected in the emergency room.

We also determined that operating rooms are underutilized, with most hospitals closing most operating rooms on evenings, weekends, statutory holidays, March break and for two to 10 weeks in the summer. During these periods, no elective surgeries are performed, and only limited numbers of operating rooms remain open for emergency surgeries.

At the three hospitals we visited, one in four patients with critical or life-threatening conditions had to wait an average of four hours for surgeries that should have started within two. Half of patients who should have undergone emergency surgery within two to eight hours waited an average of 10 or more hours longer.

Data from the Canadian Institute for Health Information also indicated that patients in Ontario hospitals had the second-highest rate of sepsis, a potentially life-threatening complication of an infection, in Canada. High bed-occupancy rates in hospitals contribute to the likelihood of a patient becoming infected during a hospital stay.

As of March 2016, more than 4,000 people were occupying hospital beds across Ontario, even though they no longer needed them, while awaiting home care or accommodation in other institutions. We calculated that hospitals could have treated about 37,550 more patients a year if this had not been the situation.

Physician Billing

Ontario's 30,000 physicians, among the best remunerated in Canada, were paid $11.6 billion in 2015/16, accounting for 23% of Ontario's total health-care spending. Physicians operate as independent service providers and are not government employees; instead, they have traditionally billed the Province for their services under the Ontario Health Insurance Plan.

To encourage family physicians to see more patients and to offer their patients more comprehensive and continuous care, the Ministry of Health and Long-Term Care (Ministry) introduced new models that encourage physicians to form group practices. Most of these models pay family physicians based on the number of patients enrolled with them for a pre-determined basket of services (called base capitation payments) rather than on a per-service basis.

We found that the Province paid physicians for base capitation under the most popular group practices (Family Health Organizations) about $522 million more in 2014/15 than it would have using the traditional fee-for-service model, in part because physicians were compensated for approximately 1.78 million patients that they had enrolled but did not treat that year.

The incremental cost of patient-enrolment models has not always led to more timely access to a family physician. Enrolled patients are still visiting walk-in clinics, other physicians and hospital emergency rooms for services treatable by their family physician. We also noted that in 2014/15, physicians in most group practices worked an average of between 3.4 and four days a week, and many did not work the number of weeknight or weekend hours required by the Ministry.

Further, the Ministry does not investigate many anomalous or possibly inappropriate billings, and does not have a cost-effective enforcement mechanism to recover inappropriate payments made to physicians. As well, taxpayers continue to pay significant amounts—$329 million in 2016—for the rising cost of physician medical-liability protection.

Electronic Health Records' Implementation Status

An Electronic Health Record (EHR) is a digital lifetime record of a person's health and health-care history, updated in real time, and readily and securely available to authorized health-care professionals. Benefits are many and include, for instance, a reduction in duplicate medical tests because there is immediate access to complete patient records at the point of patient care. The government had at one time committed to providing an EHR for every Ontarian by 2015.

EHR is an important initiative with the goal of improving the quality of patient care. However, the Ministry of Health and Long-Term Care (Ministry) never established an overall strategy and budget for the entire EHR initiative that included the expected funding of costs likely to be incurred by health agencies and organizations involved in this initiative. Over the 14 years that the government has been working on this initiative (up to 2015/16), the EHR initiative has cost the province's health-care sector more than $8 billion—even though parts of the initiative are still not fully functional. Our key message is that it is important to have an overall strategy, budget and realistic timeline for such a major initiative, in order to assess whether costs incurred are reasonable in relation to a planned budget, and whether the project is implemented as designed and according to the expected timeline.

The full participation of health-care organizations and professionals such as hospitals and labs in the EHR initiative is also critical—but eHealth Ontario, an agency that the Ministry noted is the "principal partner in delivering an EHR," cannot compel these parties to contribute patient information to EHR systems. This has contributed to significant problems with functional integration and completeness of data.

Most health-care professionals we interviewed and surveyed did not yet fully use the available systems, with over one-third saying they did not know how to use the systems.

Mental-Health Services

This year, we produced audit reports that examined **Specialty Psychiatric Hospital Services**, **Child and Youth Mental Health**, and **Housing and Supportive Services for People with Mental Health Issues (Community-Based)**.

One in five Ontarians will experience mental-health issues in their lifetime, and these issues often start in childhood and adolescence. We found that demand for care is rising dramatically, but the government has not updated its service-delivery plans and approaches to meet the demand.

Specialty Psychiatric Hospital Services

Ontario's four specialty psychiatric hospitals are the province's only public hospitals that focus primarily on providing mental-health services. They account for about half of the province's 2,760 long-term mental-health beds, used to treat people with the most severe or complex forms of mental illness.

It costs more to treat psychiatric patients at specialty hospitals than at other hospitals or in the community, and demand for mental-health services

has increased. The number of people going to hospital emergency departments for mental-health reasons increased 21% across the province between 2011/12 and 2015/16.

Our audit found that the Ministry of Health and Long-Term Care (Ministry) does not collect or report wait times for specialty psychiatric hospital services like it does for general hospitals. Data collected from the specialty psychiatric hospitals indicates that wait times increased at each of the hospitals between 2011/12 and 2015/16, with some patients waiting over three months for treatment.

At the same time, about one in 10 patients in specialty psychiatric hospitals between 2011/12 and 2015/16 did not actually need such specialty care, but could not be discharged because no other accommodation was available. Had these patients been discharged promptly, specialty psychiatric hospitals could have cared for an additional 1,400 people in 2015/16.

We also noted that Ontario does not have provincial mental-health standards, and there is currently no timetable for their development and implementation. As a result, individual hospitals have created their own standards for patient admission, treatment and discharge, and these standards differ between hospitals.

In 2014, the Waypoint Centre for Mental Health opened a new building that houses its high-security program to treat forensic patients. Since then, 90 deficiencies impacting staff and patient safety were identified, and these deficiencies contributed to 800 reported safety hazards.

Child and Youth Mental Health

The Ministry of Children and Youth Services (Ministry) provides substantial funding—$438 million in 2015/16—to more than 400 service providers and agencies that directly deliver mental-health services to about 120,000 clients across the province.

We found that hospital emergency-room visits and in-patient hospitalizations have increased more than 50% since 2008/09 for children and youth with mental-health problems, signalling a growing problem. Additionally, a lack of effective Ministry and agency procedures and standards may be preventing children and youth from receiving the level of service they need in the community on a timely basis.

We noted that the Ministry does not examine the reasons for the significant differences between agencies in cost per client and client caseload per worker. We found significant variances that should have been followed up by the Ministry. For example, about one in five agencies providing services across five core mental-health services reported average costs per client that were at least 50% higher than the provincial average.

In addition, the Ministry does not monitor whether agencies comply with its program requirements for service delivery, and we found that, in many cases, agencies do not comply. For example, the agencies we visited did not always help in the transition of discharged children and youth to other services, putting treatment gains already achieved at risk.

Housing and Supportive Services for People with Mental Health Issues

The Ontario government subsidizes over 12,300 supportive-housing units, and funds support services to individuals with serious mental illness who reside in these funded units. The shift that began in the 1990s from institutional to community mental-health services increased the need for mental-health community housing with appropriate community-based support services.

In 2015/16, the Ministry of Health and Long-Term Care (Ministry) spent more than $100 million on operating and capital costs of mental-health housing, and, through the Local Health Integration Networks, another $629 million on mental-health support services, including services for clients living in mental-health supportive housing.

As with our 2002 and 2008 audits, we again found that the Ministry still lacks consolidated information on the demand for mental-health supportive housing. Without such information, the Ministry has been unable to set goals for how many mental-health supportive housing units should be established for those in need.

As of March 2016, wait times to access mental-health supportive housing in one of the regions we visited ranged from one year to seven years; in another region we visited, there were more than 11,000 people waiting for housing placements that could take between 2.3 and 4.5 years. Long wait times are expensive for the Province, because the cost to keep an individual in a psychiatric hospital while they await other accommodations is about nine times that of living in mental-health supportive housing in the community. Further, we noted that agency wait-lists for housing do not prioritize high-need individuals, or those awaiting discharge from psychiatric hospitals.

The Environment

This year, we produced audit reports that examined **Environmental Approvals**, **Environmental Assessments** and **Climate Change**.

Environmental Approvals

In 2013, southern Ontario ranked among the highest in Canada for emissions of sulphur dioxide and fine particulate matter—contaminants known to cause respiratory problems. Environment Canada rated the water as marginal or poor quality in 22% of Ontario's freshwater rivers, which is significantly worse than the national average of 14%.

There are potentially many polluters across Ontario operating without proper approvals and only minimal oversight from the Ministry of the Environment and Climate Change (Ministry). Instead of proactively identifying these emitters, the Ministry relies largely on public complaints to identify emitters operating without environmental approvals.

The Ministry does not monitor over 200,000 approvals issued more than 15 years ago, nor have these approvals been updated to meet current environmental standards or to reflect emitters' current operations. As well, the Ministry does not know how many of these emitters are still operating. About 80% of the 32,500 emitters that received approvals in the last 15 years have never been inspected for compliance with their approvals, and the Ministry has little information on the risk they pose to the environment. Ministry inspections of the other 20% of emitters over the last five years found that, on average, between 20% and 4[illegible]% violated the conditions of their approvals, thus indicating a need for more frequent inspections.

The government has put greater emphasis on the polluter-pays principle, but taxpayers are still funding 80% of program costs, and remain at risk of having to pay for much of the clean-up costs of contamination and environmental damage caused by emitters. Our 2015 Annual Report contained a section in **Chapter 3, 3.10 Management of Contaminated Sites** that discussed contaminated sites in Ontario.

Environmental Assessments

The *Environmental Assessment Act* (Act) was passed 40 years ago and has not been significantly amended since 1996. It applies broadly to many public-sector projects and plans, but not to the private sector (except for electricity generation and transmission, waste management, and municipal infrastructure built by the private sector). When effectively conducted, environmental assessments can identify and assess stakeholder concerns and measures to prevent or mitigate negative environmental impact before a project or plan proceeds.

The Act falls short of achieving its intended purpose because of legislative gaps, despite a number of amendments since it was enacted. For instance, we found that Ontario is the only Canadian jurisdiction that generally does not require environmental assessments for private-sector projects in, for

example, mining and chemical manufacturing, which can have and have had extensive long-term environmental impacts. Of the 10 contaminated sites with the largest rehabilitation costs in Ontario, four are former private-sector mineral-extraction sites whose rehabilitation will cost the Province an estimated $968 million. In addition to our section on contaminated sites noted above, our *2015 Annual Report* also contained a section in **Chapter 3**, **3.11**, on the Mines and Minerals Program.

Although the Act applies to government proposals, plans and programs, it does not prescribe the types of plans and programs that must be assessed, and the government sometimes uses other legislation to exempt certain plans from assessment. As a result, significant long-term government initiatives have been implemented without an assessment of their full environmental impact.

There are no clear criteria to ensure Ministerial decisions about public requests for more rigorous environmental assessment processes are made objectively and for the protection of the environment. The Ministry also provides insufficient information about projects—and sometimes none at all—to enable the public to participate knowledgeably in the environmental assessment process.

Climate Change

In 2018, Ontario plans to join Quebec and California in a cap-and-trade system to combat climate change by requiring emitters to obtain "allowances"—licences to emit greenhouse gases—for each tonne of greenhouse gases they produce. Ontario expects to generate revenues from allowances of about $8 billion between 2017 and 2020, which the government has stated will be spent on emission-reduction initiatives.

Our audit noted that the Ministry's own external environmental consultant projected that only 20% of the emission reductions—about 3.8 megatonnes (Mt)—required to meet Ontario's 2020 target will occur in the province. This projection includes the impact of spending cap-and-trade revenue on greenhouse-gas reduction initiatives and the public's change in behaviour in response to the cost of cap and trade

Because Ontario intends to enter into a linked cap-and-trade system, it plans to achieve the remaining 80% (14.9 Mt) of its target by allowing Ontario emitters to purchase allowances to emit greenhouse gases from Quebec and California emitters. However, given the current oversupply of cap-and-trade allowances in Quebec and California's auctions, it is unlikely that the reduction of 14.9 Mt will be fully attributable to Ontario's participation in the linked system. Ontario emitters are expected to pay Quebec and California an estimated $466 million for allowances between 2017 and 2020. Based on early forecasts in 2015 used to inform program design, the Ministry estimated this could rise to $2.2 billion in 2030.

Our audit highlights the need for clear public reporting on how Ontario plans to meet its emission-reduction targets. No formal agreements or rules have yet been established among the three jurisdictions to prevent the same emission reduction from being reported in more than one jurisdiction.

The government's internally compiled 2016 Climate Change Action Plan (Action Plan), created after the external consultant's work, outlines how the projected $8 billion in cap-and-trade revenues will be spent to achieve emissions reductions of 9.8 Mt in 2020. This amount of reductions in emissions far exceeds the 3.8 Mt estimated by the external consultant. Both the Ministry's and the consultant's estimates include the impact of spending the same $8 billion in cap-and-trade revenue, but on potentially different greenhouse-gas reduction initiatives. More analysis is needed on how reductions will be achieved from initiatives identified in the Action Plan. For example, the Action Plan proposes to spend up to $1.32 billion to reduce electricity prices and achieve a 3-Mt reduction of greenhouse gases—but there was no analysis to support this estimate.

In addition, we found provincial ministries and agencies did not yet routinely consider how their decisions will impact greenhouse-gas emissions, and the Ministry of the Environment and Climate Change could do more to provide government-wide guidance.

More than two-thirds of the 37 actions set out in the Ministry's 2011–2014 Adaptation Strategy and Action Plan were not completed at the time of our audit.

Construction of Roads and Public Transit

This year, we examined **Metrolinx—Public Transit Construction Contract Awarding and Oversight** and **Ministry of Transportation—Road Infrastructure Contract Awarding and Oversight**.

Metrolinx—Public Transit Construction Contract Awarding and Oversight

One in every seven dollars of Ontario capital spending goes to construction projects overseen by Metrolinx, the government corporation that oversees GO Transit services and the Regional Transportation Plan in the Greater Toronto and Hamilton Area. Over the past five years, Metrolinx has spent about $4 billion to build almost 520 projects, and it is expected to spend another $27 billion over the next 10 years.

We found Metrolinx does not have adequate processes in place to consistently ensure value for money in its delivery of construction projects. There is a significant risk that it is spending more than it needs to because of deficiencies in its oversight process around construction contracts.

The lack of a process or penalties to hold design consultants and construction contractors accountable when they deliver work that is late or of poor quality contributes to late projects, inconveniences to commuters, and additional costs for Metrolinx and taxpayers.

Metrolinx does not always enforce its contractual right to recover payments from design consultants who have contributed to cost overruns resulting from their errors. As well, Metrolinx has consistently rehired poorly performing contractors who also have contributed to project delays—and when they caused delays, they were not assessed penalties, such as liquidated damages (late fines). Further, Metrolinx has not fully addressed the issue of contractors who breach safety regulations. For example, Metrolinx does not in these cases perform follow-up inspections, or exclude the contractors from bidding on future contracts for a period of time.

As well, we noted that Metrolinx has not managed its relationship with CN and CP in a way that ensures value for money, and more oversight is needed for work performed by them for Metrolinx.

Ministry of Transportation—Road Infrastructure Construction Contract Awarding and Oversight

Over the past five years, the Ministry of Transportation (Ministry) has completed almost 2,100 road projects at a cost of about $6.1 billion. About $1.4 billion of this total was spent on asphalt to build highway pavement.

Experts have raised concerns about premature cracks in Ontario highways as a result of the substandard quality of asphalt used in their construction. The Ministry expects that in the next 10 years, road-construction work will cost about $18 billion, with $14 billion of that earmarked for rehabilitating existing infrastructure including roads, and the remaining $4 billion to build new infrastructure. For the five highway jobs we examined in detail, the Ministry paid $23 million to repair premature asphalt cracking, on top of the $143 million originally paid to initially pave these highways.

The Ministry allowed the Ontario Road Builders' Association (ORBA) and the Ontario Hot Mix Producers Association (OHMPA), representing contractors, asphalt producers and cement suppliers, to significantly influence the Ministry's internal operational policies, which, not unexpectedly, now benefit primarily ORBA and OHMPA members. The

Ministry also delayed implementation of tests that they validated in 2007 to identify asphalt likely to crack prematurely—one test was implemented five years late, while another still has not been implemented across all contracts. As well, the Ministry pays contractors bonuses when they use the quality of asphalt specified in the contract—something contractors would normally be expected to do without a bonus.

We also noted that some engineers who certify structures as correctly built are hired by the contractor, and have provided certifications on infrastructure that was later confirmed to have problems.

The Ministry is lenient with contractors who perform poorly, allowing those that have received unsatisfactory ratings in the past to continue to bid for and win significant amounts of new work from the Ministry. In addition, the Ministry has paid to repair sub-standard work, even when the repairs should have been covered by the contractor's warranty.

Government Procurement

The Government of Ontario spends an average of $3.5 billion a year to procure goods and services (not including capital spending), so it is important to ensure procurement is done in a way that gives the Province value for money.

We found that Supply Chain Ontario, a division of the Ministry of Government and Consumer Services that assists ministries with procurement, manages preferred supplier arrangements effectively. As well, the ministries we examined generally followed procurement requirements, and their purchases were mostly competitive, fair and cost-effective. However, Supply Chain Ontario needs more information to effectively identify new bulk-buying opportunities that could potentially save money on future purchases.

Based on our review of a sample of procurements, we found that ministries were not always evaluating and documenting suppliers' performance as required. A supplier's past performance can provide insight into future performance issues. We also noted that a new online procurement system is not yet widely used because of design concerns.

Over the past two years, ministries made approximately 3,200 requests for IT staff. About 90% of these requests were filled using external consultants, because of an insufficient number of permanent IT employees. Treasury Board Secretariat, which oversees IT staffing, estimates that a consultant costs $40,000 more annually than a permanent employee. Because of the shortage of permanent IT employees, demand for IT services was being met through a more expensive option. Consultants were often hired without an in-person interview, and payments to them can be authorized by the same person who hired them.

Employment and Training

The Ministry of Advanced Education and Skills Development (Ministry), through Employment Ontario, offers programs through 400 third-party service providers to help Ontarians develop skills and find sustainable employment. With a budget of over $1 billion, this program can play a significant role in the Ontario economy. Ontario's overall unemployment rate in 2015 was generally in line with the national average of 6.8%, but its 14.7% youth unemployment rate has been consistently higher than the national average over the last decade by two percentage points.

Our audit found that the Ministry does not collect or analyze regional information on labour-force supply and skills demand to determine which jobs face a shortage of skilled workers. As a result, the Ministry lacks detailed and timely labour-market information on which to make informed program and funding decisions. As a result, there is little assurance that funding is directed toward areas that will bring sustainable employment. We noted that the majority of employment and training program clients were unsuccessful in finding full-time employment in their chosen career.

We also noted that fewer than half of those who begin an apprenticeship program in Ontario complete it. Despite this, however, the Ministry does not review apprentice completion rates by training provider or employer, and it does not compile and analyze survey results separately for the majority of questions for those who completed their apprenticeships and those who withdrew.

Toward Better Accountability

In our *2015 Annual Report*, we introduced a new chapter, called Toward Better Accountability, to create a broader discussion of government accountability that would complement our value-for-money and financial-statement audit work. This year, we continue this practice in **Chapter 4** of **Volume 1** with the following four reports:

- **Accounting Treatment of Pension Funds**—We provide a general overview on pension accounting that may assist the reader in more fully understanding the pension asset issue discussed in Chapter 2 of Volume 1.
- **The Provincial Public Appointment Process**—Timely appointments of qualified candidates to the Province's various agencies, boards, commissions and other entities is essential to ensure appropriate oversight and the protection of public interests. Each year, the provincial government makes approximately 1,500 public appointments to 184 provincial agencies and 360 other entities. In our review of the appointment process, we noted that although Ontario has a mature process with a centralized appointment Secretariat, there have been significant delays in appointments and reappointments in the last five years.
- **Information and Information Technology (I&IT) General Controls**—This audit looked at whether the province has effective I&IT policies, procedures and controls in place to cover security, changes, operations, availability, capacity, continuity and disaster recovery, to ensure the integrity of three key IT systems. This audit also enabled us to assess a few broader IT subject areas. For example, we noted that there was no overall I&IT strategy between 2013 and 2016. As well, I&IT service agreements between I&IT clusters and ministries are not in place for 75% of government I&IT systems.
- **The Nursing Retention Fund**—The Nursing Retention Fund (Fund) was designed to maintain nursing positions in Ontario's public hospitals where reductions in services or closures of units would otherwise have led to nurse layoffs. The Fund aimed to achieve this by paying hospitals to cover the costs of training nurses, and to cover their salaries and benefits for up to six months during the training. Our review looked at why only limited funds were distributed to hospitals during the Fund's operation, and found that, while the Fund was appropriately administered, its eligibility criteria limited the circumstances under which hospitals would be eligible for funds. In 2016, all unspent funds were disbursed to the Registered Nurses' Association of Ontario and the Registered Practical Nurses Association of Ontario for nursing education.

Review of Government Advertising

The *Government Advertising Act, 2004* (Act) mandates my Office to review most government advertisements and issue an approval before they can be run to ensure they are not partisan. The Act originally gave the Auditor General appropriate discretion in determining what constitutes partisan advertising.

However, the Act was significantly amended in 2015 to remove the Auditor General's discretion and to provide a narrow definition of "partisan" that now allows for publicly funded self-congratulatory government advertising on television and radio, in print and online.

For the year ending March 31, 2016, the government spent $49.9 million on advertising, as compared to $30 million in the previous year. This year's total includes $5.73 million on ads for the Ontario Retirement Pension Plan.

In the past year, we had to approve as compliant with the amended Act three campaigns that straddled the 2015/16 and 2016/17 fiscal years, and for which complete information about costs was not yet available. All three appeared designed primarily to give the government credit for certain initiatives.

The first campaign included promotion of "Ontario's nearly $160-billion investment in infrastructure," while the second told Ontarians that the government is increasing health-care funding by $1 billion in the current fiscal year. The third promoted the government's view that Ontario schools provide "a world-class education" and that "more Ontario students are reaching their potential than ever before."

In having to review and approve these submissions as compliant with the revised Act, we advised the government that their scripts would have been deemed partisan advertising under the previous Act, because they appeared aimed at fostering a positive impression of the government, rather than providing the public with useful information.

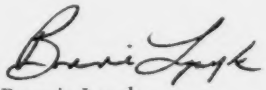
Acknowledgements

On behalf of my team, I again want to thank the many people in the public and broader public sectors who were involved in our work for their assistance and co-operation in the completion of this year's audits.

As well, we thank the various experts who shared with us their knowledge and advice on our value-for-money audits, and the public accounting firms that we worked with during the past year.

We look forward to continuing to serve the Legislative Assembly and, through it, the citizens of Ontario.

Sincerely,



Bonnie Lysyk
Auditor General of Ontario

Our Team

It takes a massive effort by many people to perform the research, audit, writing and administrative-support work required to produce an Annual Report of this scope and substance. The following is a list of the people with our Office who worked to produce this Report:

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Chan, Ariane
Chan, Sandy
Chang, Sally
Chatzidimos, Tom
Cheung, Anita
Cheung, Helena
Chiu, Rudolph
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Chohan, Navreen
Cumbo, Wendy
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Lee, Peter
Leung, Benjamin
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Lozinsky, Arie
Malik, Mohak
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Martino, Mary
Marume, Kundai
May, Kristy
MacDonald, Cindy
Mahmood, Muddassir
McGibbon, Shirley
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Munroe, Roger
Muradzada, Zahid
Myers, Sohani
Ng, Wendy
Nguyen, Lisa
Nowak, Alice
Ojisua, Mafu
Parmar, Gurinder
Patel, Mamta
Pedias, Christine
Pellerin, Louise
Pelow, Bill
Persaud, Shanta
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Qazi, Osman
Randoja, Tiina
Rodriguez, Oscar
Rogers, Fraser
Reuben, Adam
Saeed, Shariq
Shah, Shreya
Sidhu, Pasha
Sin, Vivian
Stavropoulos, Nick
Tanudjaja, Georgegiana
Tepelenas, Ellen
Thejo, Ratmono
Thomas, Zachary
Truong, Alexander
Tsikritsis, Emanuel
Tso, Cynthia
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Vanderheyden, Adam
Volodina, Alla
Walton, Jeremy
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Chapter 1

Summaries of Value-for-Money Audits

Introduction to Mental Health Audits

Sections 3.01, **3.07**, **3.08** and **3.12** in **Chapter 3** deal with mental health:

- 3.01 Child and Youth Mental Health
- 3.07 Housing and Supportive Services for People with Mental Health Issues (Community-Based)
- 3.08 Large Community Hospital Operations
- 3.12 Specialty Psychiatric Hospital Services

What Is Mental Illness?

Ontario's health-care system and the delivery of health-care services are regularly the topics of audits by our Office. Often, these audits focus on physical illnesses and related service delivery, such as palliative care, land ambulances and cancer screening, to name a few. With a recent increase in public awareness of mental illness and an increasing level of resources devoted to its treatment, our Office selected four aspects of mental health services to audit this year.

While people with good mental health live in a state of well-being in which they can cope with the normal stresses of life, function productively and contribute to their community, people suffering from mental illness experience disturbances in their thoughts and/or behaviours that make them unable to cope with life's ordinary demands and routines. Mental illness can be temporary or permanent, and can range from mild illness (such as limited episodes of depression) to more enduring and complex conditions (such as bipolar disorder and schizophrenia). Further, the symptoms experienced by those diagnosed with mental illness can vary greatly—from having little impact on their ordinary life to having crippling effects, resulting in the person's inability to properly function in society and posing a risk of harm to both themselves and others.

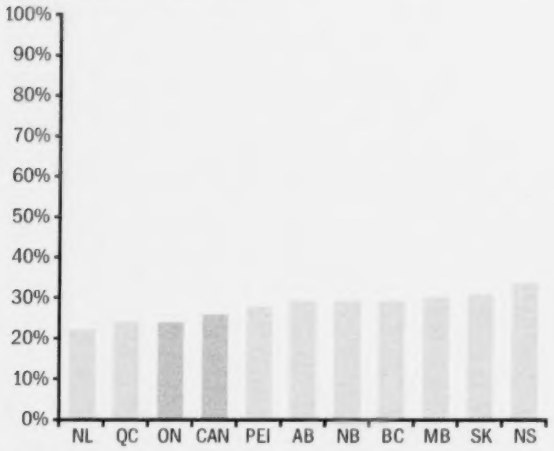
Prevalence of Mental Health Problems in Ontario and Canada

It is estimated that one in five Ontarians (about 2.8 million people) will experience a mental health problem at some point in their lives. According to Statistics Canada, the prevalence of mental illness in 2012 (the latest year for which data is available) was 26% for the whole country. By province, the prevalence of mental illness ranged from a low of 22% in Newfoundland and Labrador to a high of 34% in Nova Scotia, as shown in **Figure 1**. The prevalence in Ontario was 24%.

A 2015 Government of Canada study showed that the number of adult Canadians using health services for a mental illness remained stable between the 1996/97 and 2009/10 fiscal years, but jumped as much as 44% during the same time frame among youth aged 10–14 years. In Ontario specifically, the last five years ending March 31,

Figure 1: Prevalence of Mental Illness for Individuals Aged 15 and Over by Province, 2012

Source of data: Statistics Canada



Note: Includes all categories and levels of mental illness. In contrast, serious mental illness is experienced by about 2.5% of Ontario's population (categorized as a diagnosis of mental illness such as schizophrenia, depression, bipolar disorder or personality disorder; a long duration of illness; and a significant disability in day-to-day functioning).

2016, have seen a 21% increase in the use of emergency departments for mental health conditions.

Scientific understanding of mental illness is improving. Research shows that mental illness is a complex interaction of genetic, biological and personality traits paired with circumstances and social environment. Social conditions such as poverty, inadequate housing, unstable employment and lack of education are some factors that increase the risk of effects on mental health. It is also known that mental health problems affect men and women differently and at different stages in life. We have learned the importance of addressing these conditions early on: 70% of young adults experiencing mental health problems report them as having started in childhood.

Mental Health Care in Ontario

The Ontario Government spends approximately $3.5 billion annually on mental health and addictions services in support of its citizens suffering from mental illness. Of this amount, $3.1 billion is spent by the Ministry of Health and Long-Term Care, and the remainder is spent by the Ministry of Children and Youth Services, which funds a separate community child and youth mental health system. In addition to the $3.5 billion, other ministries of the Ontario Government also allocate resources to mental health services. These services are delivered through a large range of public institutions and groups including schools, hospitals (including psychiatric), community health, child and youth, and other social service agencies, supportive housing agencies, prisons, primary care centres (for example, clinics and doctors' offices) and professionals in private practice. The delivery of these services in Ontario, however, is not centralized or co-ordinated. Rather, the delivery and oversight of mental health services is quite fragmented, with no province-wide integrated network of care, support or oversight.

Recognizing the potential for improvement that greater co-ordination of providers and services might bring, in 2011 the Ontario Government launched *Open Minds, Healthy Minds*, a wide-ranging mental health and addictions strategy. By working with 15 ministries and across government levels, this strategy seeks to improve the quality and co-ordination of mental health services available, and thus the quality of life of Ontarians. A large part of this strategy focuses on early intervention and support for children, in order to identify and intervene in child and youth mental health and addiction issues early in life.

Building on the provincial strategy, in 2012 the Ministry of Children and Youth Services launched *Moving on Mental Health: A System That Makes Sense for Children and Youth*, an action plan to provide a simplified and improved experience for children and youth with mental illnesses and for their families. In particular, it seeks to strengthen community ties so that families will know what mental health services are available and how to access them.

Also in support of *Open Minds, Healthy Minds*, the Mental Health and Addictions Leadership

Advisory Council was struck in 2014 with a three-year mandate to provide advice to the Ministry of Health and Long-Term Care on the implementation of its mental health strategy. Its members represent diverse sectors of the population, including service providers, experts and people with personal experience of mental illness.

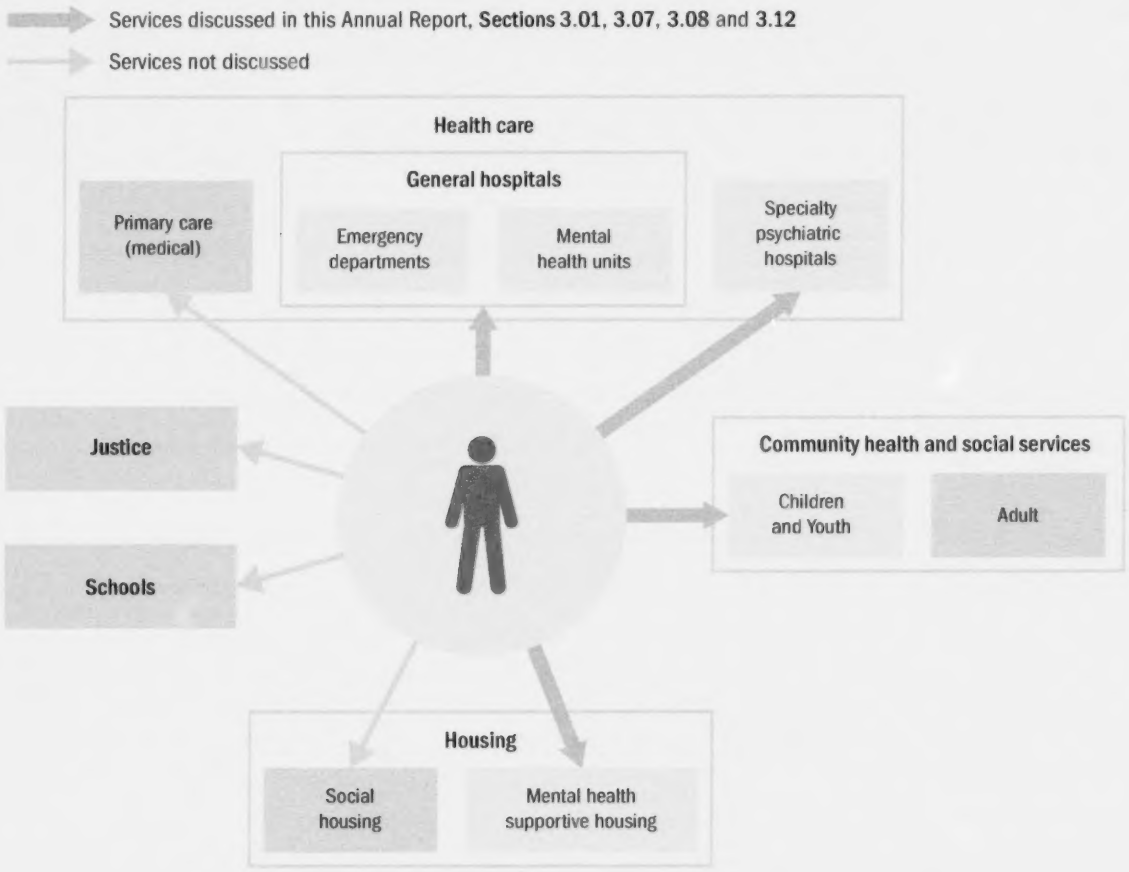
Pathways of Access to Care

Depending on one's age, location and condition, individuals who are experiencing mental illness have a number of avenues available to get help. Nevertheless, vulnerable individuals have particular difficulty in accessing services. Mental health care services in Ontario are delivered by many different sectors and organizations, as shown in **Figure 2**, and are overseen by multiple provincial ministries.

A person seeking mental health services may access appropriate services in the following ways:

- Primary care, such as one's family doctor, is an option for treatment or referrals to other professionals and services.
- Crisis and emergency care can be accessed through a general hospital emergency department, where one can be treated or stay until further referral to other professionals and services.
- In-patient services are available in 87 of the general hospitals for those with serious mental illnesses.

Figure 2: Services Available to Ontarians Living with Mental Illness
Prepared by the Office of the Auditor General of Ontario



- Specialty psychiatric hospitals treat individuals suffering from the most severe mental illnesses (the four that operate in Ontario are the Centre for Addiction and Mental Health in Toronto, Ontario Shores Centre for Mental Health Sciences in Whitby, the Royal Ottawa Health Group in Ottawa and Brockville, and Waypoint Centre for Mental Health Care in Penetanguishene).
- For children and youth aged 18 and under, services are available through more than 400 community mental health agencies and service providers. These may be accessed directly at the agency or through a referral (from, for example, a school or other health-care professional).
- For adults, support such as crisis intervention, counselling and, if necessary, supportive housing is available through about 300 community-based mental health agencies.

The Four Mental Health Services Audits

In this year's Annual Report, our Office has conducted value-for-money audits of four areas of mental health services in Ontario: housing and supportive services for people with mental health issues, large community hospital operations, specialty psychiatric hospital services, and child and youth mental health.

- In our audit of housing and supportive services for people with mental health issues, we looked at the effectiveness of supportive housing programs delivered by the Ministry of Health and Long-Term Care, in conjunction with the Local Health Integration Networks (LHINs) and service providers. This audit examined the co-ordination of services with other entities, the cost-effectiveness of the program, and the delivery and measurement of the support services.
- In our audit of hospital operations, we assessed whether the systems and procedures in place at large community hospitals could ensure that patients receive timely access to quality, safe, reliable and equitable health-care services, that resources are efficiently used, and that operational effectiveness is measured, assessed and reported. Specifically, this audit looked at three large community hospitals with a focus on patient admissions and movement through the hospital.
- With the specialty psychiatric hospital services, our audit work at the Ministry of Health and Long-Term Care and LHINs focused on their oversight and funding of the four specialty psychiatric hospitals, while our audit work at the hospitals focused on their provision of mental health services and whether the procedures and processes in place ensure that the needs of the patients and the community are met.
- In our audit of child and youth mental health, our objective was to assess whether the Ministry of Children and Youth Services, and child and youth mental health agencies, had effective policies and procedures for ensuring that children in need of mental health services receive appropriate and timely services in accordance with program requirements. We also considered whether funding provided to agencies is commensurate with the value of the services provided.

Summaries of Value-for-Money Audits

3.01 Child and Youth Mental Health

The Ministry of Children and Youth Services (Ministry) provides funding for community-based mental health services in Ontario—such as counselling and therapy, intensive treatment, specialized consultation and assessment, and crisis support—to children and youth (from birth to 18 years of age),

and their families, who are experiencing or at risk of experiencing mental health problems, illnesses or disorders such as depression, anxiety, and attention deficit/hyperactivity disorders.

In 2015/16, the Ministry provided $438 million in transfer payments through its Child and Youth Mental Health (CYMH) program to more than 400 service providers, including agencies that primarily deliver child and youth mental health services and multi-service agencies that deliver a number of other Ministry-funded programs. These agencies reported over 120,000 registered clients.

In our audit this year we noted that many of the issues we highlighted in our 2003 audit of the CYMH program remain significant concerns. Specifically, we found that the Ministry still does not monitor and effectively administer this program to ensure that children and youth in need of mental health services are provided with timely, appropriate and effective mental health services, and to ensure that mental health services are delivered efficiently. While the Ministry has established program delivery requirements, it does not monitor whether agencies comply with these requirements, and its requirements are not always clear, leading to inconsistencies in service delivery across the agencies.

Consistent with our findings in our 2003 audit of community-based child and youth mental health services, the Ministry continues to primarily fund agencies based on historical spending instead of the current mental health needs of the children and youth they serve. We also found that the agencies' cost per client served varies significantly and could be in some respects indicative of funding inequity between agencies, but the Ministry has not assessed these variances to determine their reasonableness. Further, as we noted in our 2003 audit, the Ministry does not measure individual agency performance against targets, and does not effectively monitor client outcomes or overall program performance against measurable and meaningful targets.

Hospital emergency room visits by children and youth and their in-patient hospitalizations for mental health problems have increased more than 50% since 2008/09. Although this trend signals a growing problem, the Ministry has not analyzed the reasons for the increase.

In our audit this year we also found that the four agencies we visited do not always comply with Ministry requirements for the delivery of services. Also, none of these agencies effectively monitor the outcomes of children and youth to help ensure that they are provided with timely, appropriate, and effective mental health services based on their assessed needs.

The following are some of our specific concerns about the delivery of mental health services by agencies:

- **Agencies did not always help in the transition of discharged children and youth to other service providers putting treatment gains already achieved at risk.** None of the four agencies we visited had policies to guide the actions of its staff when discharging clients that require transition to another service provider. Managing transitions is important to maintain continuity of service for clients and minimize disruption to the treatment gains they have already achieved. At one agency, we found cases where clients were discharged to the care of a Children's Aid Society while still requiring service, but were not provided any help to transition to another mental health service provider. At another agency, 50% of the discharged files we reviewed included a recommendation by the agency to transition to another service provider. However, the agency did not work with the service provider it recommended to facilitate the transition, as expected by the Ministry.
- **The mental health needs of children and youth are not assessed consistently, increasing the risk of inconsistent service decisions.** Agencies are required to assess the needs of children and youth using standardized, evidence-informed assessment tools. Standardized, evidence-informed assessment tools are intended to enhance the consistency

and objectivity of assessments. However, we found such tools were either not completed, or it was not evident that results from these assessment tools were used to help develop initial service plans, in about 50% to 100% of the cases we reviewed at three of the four agencies we visited. In addition, at each of the four agencies visited, we also found that in 20% to 100% of the cases we reviewed, the agencies either did not complete evidence-informed assessment tools, or it was not evident that they used the results of these assessment tools to periodically assess the mental health services provided to children and youth to help update service plans, and to inform decisions to discharge children and youth from service.

- **Absent Ministry direction, timelines for reviewing service plans varied between agencies, increasing the risk of delaying children and youth from receiving services most appropriate to their needs.** Although the Ministry requires agencies to regularly review the service plan of each client, it does not prescribe timelines for doing so. We found that the agencies we visited had different timelines for reviewing service plans, ranging from three to six months. As well, at two of the four agencies we visited, we found that in some cases the agencies either did not follow their own timelines or did not review service plans at all as required by the Ministry.
- **There is a risk that the mental health of children and youth can deteriorate while waiting for service, but little is done to monitor wait time trends and their impact.** The agencies we visited do not currently monitor trends in wait times to assess their reasonableness and to identify issues that may require follow-up or corrective action. In addition, although most of the agency caseworkers we spoke to told us that the mental health of at least some, and as many as half, of the children they work with deteriorated while waiting for service, none of the agencies we visited track the impact of wait times on the mental health problems of children and youth waiting for service. We noted that average wait times for some services in 2015/16 exceeded six months at three of the four agencies we visited.
- **Agencies do not monitor and assess client outcomes to determine if clients benefited from the services they received.** The agencies we visited did not consistently determine and record whether clients achieved a positive outcome at the end of their mental health service, as required by the Ministry. As well, all four agencies we visited did not monitor client outcomes to assess their reasonableness and to identify trends that may require follow-up and/or corrective action to help ensure children and youth receive appropriate and effective mental health services.
- **A lack of supervision of key decisions by caseworkers could increase the risk of negative consequences for children and youth.** Neither the Ministry nor the four agencies we visited require supervisors in agencies to review and approve key decisions and documents completed by agency caseworkers.

The following are some of our specific concerns about the Ministry's administration of the Child and Youth Mental Health program:

- **Ministry does not fund agencies based on the current needs of children and youth served.** Similar to when we last audited the program in 2003, the Ministry continues to allocate the vast majority of funding to agencies based on historical allocations instead of the mental health needs of the children and youth they serve. In addition, we found that the Ministry's plan to implement a new needs-based funding model by 2016 has been delayed, and a timeline for its implementation has yet to be determined.
- **Ministry does not provide clear program requirements to agencies and there is**

insufficient Ministry oversight of the services delivered by agencies to help reduce the risk of inconsistent service delivery. Although the Ministry has established minimum expectations for the delivery of services, it has not implemented a process to monitor whether agencies comply with these requirements, and we found many cases where they did not. In addition, we found that the Ministry's expectations are in some respects general, increasing the risk that they will be interpreted and applied inconsistently by agencies. For example, the Ministry requires that clients on waitlists for service be informed at regular intervals about their status, but it has not defined what a regular interval should be. As a result, we found that just one of the agencies we visited had a policy and time frame to update clients about their status while on a waitlist.

- **Ministry does not assess the reasonableness of significant differences between agencies in costs per client and client caseloads per worker to help ensure agencies are effective and efficient.** The Ministry collects information from agencies on the services they provide, their staffing levels and financial data. However, the Ministry does not review this information to identify and assess whether significant differences between agencies in costs per client served and caseloads per agency worker are reasonable. We analyzed this data for 2015/16 for all agencies and found significant variances that warrant Ministry follow-up. For example, we looked at the costs for providing five mental health services, and found that approximately one in five agencies reported average costs per client that were at least 50% higher than the provincial average. As well, between 16% and 24% of agencies reported average caseloads per worker that were at least 50% larger than the provincial average for these same services.
- **Ministry does not monitor the performance of the program or agencies to facilitate corrective action where needed, and does not collect data on all current Ministry performance indicators.** Although the Ministry introduced 13 new performance indicators in the 2014/15 fiscal year, it is still not collecting data on three of them, and has not set targets for any of the indicators against which to measure results. In addition, even though agencies have been reporting their data on the indicators, the Ministry has not analyzed the results to identify if follow-up and corrective action is needed at specific agencies. Our analysis of the Ministry's data identified variances that should be followed up by the Ministry. For example, nearly one in five agencies reported an average wait time for intensive treatment services that was at least 50% longer than the provincial average of 89 days, and nearly one-third of agencies reported that less than 50% of children and youth who ended service with their agency had a positive response to treatment compared to the provincial average of 64%.
- **Better co-ordination with other ministries may help with the delivery of mental health services and improve the outcomes of children and youth.** Although the Ministry led the Ontario Government's Comprehensive Mental Health and Addictions Strategy (Strategy) from 2011/12 to 2013/14, the Ministry has not worked with the other ministries participating in the Strategy to identify whether further opportunities might exist to improve the way the province provides mental health services. In 2014, the responsibility to lead the Strategy transferred to the Ministry of Health and Long-Term Care.

Since 2012, the Ministry has led the implementation of the Moving on Mental Health Plan including taking a number of steps to help improve the program. Some steps taken were as follows:

- Defining core mental health services delivered by agencies.
- Committing to the Development and implementation of an equitable funding model for core mental health services delivered by agencies that reflects community needs.
- Selecting lead agencies in geographic areas that will be responsible for planning and delivering core mental health services. They will also be responsible for creating clear pathways to both core mental health services, and services provided by other sectors such as education and health, so that parents will know where to go for help and know how to get services quickly.

However, we found that while the Moving on Mental Health Plan was expected to be implemented in about three years, it has been delayed and it is unclear when the Plan is expected to be fully implemented.

3.02 Climate Change

Scientific studies indicate increased emissions of greenhouse gases, such as carbon dioxide and methane, from human activities have warmed the Earth's atmosphere and altered climate patterns around the world. Scientists have documented the effects of climate change including the melting of the polar ice caps, rising sea levels, and an increased number of extreme weather events.

The international community has highlighted climate change as an urgent and potentially irreversible threat to humans and the environment, and agreed an international response is required to reduce greenhouse-gas emissions.

Ontario accounts for less than 1% of the world's annual greenhouse-gas emissions, but Ontario's annual average emissions per person is higher than the global average, though lower than the Canadian average.

The Ministry of the Environment and Climate Change (Ministry) has also identified climate change as a critical global environmental and economic challenge that will bring increasingly severe weather to Ontario in coming years.

The Ministry has a mandate to lead Ontario's efforts to reduce greenhouse gases and adapt to the effects of climate change. To do this, it has defined emission-reduction targets and introduced policies and programs, one of the most significant of which is a cap-and-trade system set to commence in 2017. The rules for how cap and trade will operate in Ontario as well as how cap-and-trade revenues are to be spent have been set out in the *Climate Change Mitigation and Low-carbon Economy Act, 2016* and its regulations.

Under cap and trade, businesses that emit greenhouse gases will have to obtain "allowances" equal to their annual emissions—effectively a licence to emit. One allowance would permit the emission of one tonne of carbon dioxide, or its equivalent in other greenhouse gases.

These allowances can be provided free by the government, sold at government auctions, or bought and sold between emitters—the "trade" in cap and trade. "Cap" refers to the limited total number of allowances the government releases into the market annually.

In theory, as the government reduces the supply of allowances each year, the price would rise. Over time, therefore, businesses would find it more economical to develop ways to cut their emissions rather than buy increasingly costly allowances. Also, a business whose emissions are less than its allowances could generate revenues by selling those surplus allowances to other businesses that need them to continue operating.

Instead of an Ontario-only system, the province plans to link its cap-and-trade system to existing ones in Quebec and California, which means that businesses in all three jurisdictions will be able to trade allowances with each other. This would also allow one jurisdiction to claim an emissions reduction that was actually achieved in another.

The Ministry has said Ontario's cap-and-trade program and the revenue it generates for other initiatives will be key to Ontario's fight against

climate change. It has also said that Ontario is on track to achieve its target to reduce 2020 emissions by 15% from 1990 levels. The Ministry has not finalized the design of Ontario's cap-and-trade system beyond 2020 and told us that its estimates and projections related to the impact of cap and trade beyond 2020 are very preliminary.

Our audit indicates that the cap-and-trade system will result in only a small portion of the required greenhouse-gas reductions needed to meet Ontario's 2020 target. Among our findings:

- **It is likely that less than 20% of reductions required to meet the province's 2020 target will be achieved in Ontario:** Of the 18.7 megatonnes (Mt) of greenhouse-gas emissions that will have to be cut to achieve the 2020 target, only 3.8 Mt (20%) are expected to be in Ontario. The remaining 80%—about 14.9 Mt—is actually forecast to be reduced in California and/or Quebec, yet Ontario plans to take credit for both its own 20% (3.8 Mt) reduction and this 80% (14.9 Mt) reduction occurring outside of Ontario. We note that the 2015 Paris Agreement allows one country to claim another's emissions reductions, but only if both federal governments (e.g., Canada and the United States) have formally agreed to such an exchange. At present, no such agreement exists. Further, the final determination of whether Ontario has met a given target is based on the National Inventory Report prepared by the federal government, which also does not count reductions occurring outside Ontario.
- **Small reductions in emissions in Ontario expected to come at significant cost to Ontario businesses and households:** Under the linked cap-and-trade system that the province plans to implement, Ontario businesses are expected to pay up to $466 million by 2020 to Quebec and California for allowances. Based on preliminary estimates by the Ministry in 2015 used to inform program design, that amount could rise to $2.2 billion in 2030—all of it money that will leave the Ontario economy. If initiatives outlined in the Government's Climate Change Action Plan are successful at reducing emissions over the long term, this number may be lower. In addition, Ontario households and businesses are forecast to pay about $8 billion more to the Ontario government over four years beginning in 2017 for fossil fuels such as gasoline and natural gas. The Ministry estimates households are expected to face an average increase in these direct yearly costs of $156 in 2017. Preliminary estimates by the Ministry of Finance indicate that this amount will rise to $210 in 2019 and that households are also expected to face additional yearly indirect costs on goods and services of $75 in 2019.
- **The Ontario Energy Board has ruled not to separately disclose the cost of cap and trade on natural gas bills despite stakeholder groups' interest in disclosure:** The Ontario Energy Board ruled that separate disclosure on natural gas bills is not necessary despite 75 of 80 stakeholder groups indicating a preference for such disclosure. Additionally, our survey of natural gas ratepayers found that 89% of respondents also thought it was important to disclose the impact of cap and trade on natural gas bills.
- **Under the linked system, Ontario's cap does not actually control the amount of greenhouse gases that can be emitted in Ontario:** Because Ontario has chosen to link with California and Quebec, Ontario may exceed its own emissions cap if Ontario emitters decide to purchase allowances from Quebec or California. The cap on emissions set by the Ontario government consequently does not actually control Ontario emissions.
- **Ontario is not expected to help cut significant emissions in Quebec and California in the short term:** The Ontario government has said that this province's involvement

in a linked cap-and-trade system will help reduce emissions in Quebec and California as businesses there become aware of a market in Ontario for their allowances. However, the Ministry has no evidence of this. In fact, allowance-trading information for Quebec and California as of August 2016 indicates there may currently be a surplus of allowances—over 60 Mt of allowances went unsold in the last auction, indicating that well over the 14.9 Mt of allowances that will be needed by Ontario companies are *already* available. This makes it unlikely that, in the short term, there will be any significant decrease in Quebec and California emissions as a result of Ontario businesses buying these allowances.

- **More emissions reductions may be reported than actually achieved:** No formal agreements or rules have been established among the three jurisdictions to prevent a reduction of emissions from being reported in more than one jurisdiction. For example, if an Ontario company buys an allowance from California, that allowance could be reported by the Ontario government as a reduction in Ontario, thereby helping Ontario meet its target. However, California may also count the same reduction toward its target—meaning more reductions overall would be claimed than were actually achieved.

In the four-year period from 2017 to 2020, the Ministry expects to raise about $8 billion in revenues from the sale of cap-and-trade allowances, and it has committed this revenue largely to emission-reduction initiatives.

These initiatives are identified in the Climate Change Action Plan (Action Plan) that the Ministry released in June 2016. The Action Plan estimates that these initiatives will collectively reduce emissions by 9.8 Mt—yet we noted that the Ministry's own environmental consultant estimated cap and trade and the spending of cap-and-trade revenues on these types of initiatives would yield reductions of only 3.8 Mt—slightly more than one-third the Ministry's estimate. Based on our review of the Action Plan, we noted that:

- **Action Plan contains unrealistic or unsubstantiated assumptions:** These include:
  - *Electricity price reductions will have marginal impact:* Cap and trade is expected to bring higher electricity prices, which may lead people to switch to cheaper natural gas—a fossil fuel that also produces greenhouse gases. Between 2017 and 2020, the Ministry plans to spend up to $1.32 billion of cap-and-trade revenues to address this issue. The Action Plan indicates that this will result in 3 Mt of reductions. However, neither the Ministry nor the provincial agency that oversees Ontario's electricity system could show how they arrived at the 3-Mt estimate. In addition, the $1.32 billion is expected to have only a small impact on reducing the expected electricity price increases. In particular, electricity prices are projected to increase by 14% for businesses and 25% for households; after applying the $1.32 billion, businesses will still face a 13% increase and households 23%.
  - *No plan for achieving renewable natural gas goal:* $100 million of cap-and-trade revenues is to be used to help natural gas distributors increase their use of biogas, a "renewable" natural gas made from the decomposition of organic materials. The Action Plan indicates this initiative will reduce emissions by 1 Mt. However, our review of information from the Biogas Association of Canada indicates that the current production capacity for biogas is insufficient to meet this proposed demand. In fact, the required capacity to achieve the 1 Mt is 500 times more than what is currently available. The Action Plan does not indicate how this shortfall will be met.
- **Action Plan commits about $1 billion to previously approved initiatives:** Some initiatives, such as the Regional Express Rail transit

project, were approved years before the Action Plan was created. By including these projects in the Action Plan, the Province has found an alternative way to fund their costs—but will not achieve any additional emissions reductions.

Our other findings include:

- **The Ministry achieved its 2014 emissions reduction target:** The Ministry achieved significant reductions in greenhouse gases by 2014, primarily due to closing all coal-fired power plants. The Ministry has also said that, had it not been for the 2008 economic downturn, Ontario would likely not have met its 2014 emission target.
- **Greenhouse-gas reductions not a priority elsewhere in government:** The reduction of greenhouse gases is not an established priority of many ministries, and there is no government-wide process to ensure climate change is adequately considered in decision-making processes. The mandates and key priorities of some ministries are in conflict with the goal of reducing emissions, and these divergent goals have not been addressed to ensure emissions reduction is considered in decision-making.
- **Many items from the 2011 Adaptation Plan never carried out:** The Ministry has taken little action to identify or follow up on key risks Ontario faces from the anticipated future effects of climate change. Although the Ministry issued an Adaptation Plan in 2011 that was to have been fully implemented by 2014, many of the actions set out in the Plan had not been completed as of August 2016. In addition, the Ministry had not reviewed this Plan to determine whether it should be updated to reflect current information. Areas that require significantly more action include:
  - strengthening winter ice roads to northern communities to protect the communities from increasing isolation caused by climate change; for example, the communities were more reliant on air transport last winter to bring in essential supplies such as food;
  - developing a Growth Plan to support northern community decision-making and monitoring on the impact of climate change, as well as measures to protect and preserve air and water quality;
  - updating provincial building codes to ensure that buildings can resist such effects of climate change as storm water flooding;
  - carrying out a Ministry commitment to review all the different types of buildings owned or controlled by the government to assess them for their resilience to the effects of climate change; instead, the Ministry reviewed only three of the almost 5,000 buildings directly owned or controlled by the Province; and
  - carrying out an assessment of energy infrastructure to ensure it can continue to produce and distribute power during increasingly extreme weather.

Subsequent to our audit, in October 2016, the federal government announced its intention to implement a minimum national carbon price, starting in 2018. The federal proposal is preliminary and, at the time of the completion of our audit, further details were not available to fully assess the impact of this new federal policy on Ontario's projected emissions reductions.

3.03 Electronic Health Records' Implementation Status

The Ministry of Health and Long-Term Care (Ministry) began developing provincial technology infrastructure in 2002 with the creation of the Smart Systems for Health Agency. The functions of this agency, as well as a Ministry branch that previously worked on Electronic Health Record (EHR) application and clinical data management projects, were amalgamated into eHealth Ontario when it was created in 2008.

eHealth Ontario's mandate is to implement a system that, in addition to providing an EHR for every Ontarian, includes a data network that stores EHR data and makes it quickly and securely available to health-care providers.

An EHR is defined as a digital lifetime record of an individual's health and health-care history, updated in real time and available electronically to authorized health-care providers. An EHR system allows for the exchange of stored patient health information so that health-care professionals can quickly access patient data, thereby improving quality of care and creating efficiencies.

EHRs will replace physical records (on paper and x-ray film, for example) that are not always up to date or readily accessible to health-care providers, creating a potential for error and duplication.

In 2008, and again in 2010, the Ministry set 2015 as the target year for eHealth Ontario to implement a fully operational EHR system across Ontario. By then, although some EHR projects were up and partially running, a fully operational province-wide EHR system was not in place. The Ministry did not formally extend the 2015 deadline, but eHealth Ontario continued its work and expects to complete the remainder of its project-build work by March 2017. It is unclear when a fully operational EHR system will be available in Ontario.

We found that implementation of EHRs in Ontario has progressed over the last 14 years. For example, the Ontario Laboratories Information System contains a significant number of lab tests done in the province, and many community-based physicians have adopted Electronic Medical Records that replace patients' paper files.

While some individual systems have been developed to collect and provide specific types of patient health information, they do not have complete information and full functionalities, and there is still no provincially integrated system that allows easy and timely access to all this information.

This means that it is still not possible for all authorized health-care professionals to access complete health information (e.g., lab tests, drug information or x-rays) about a patient regardless of where in Ontario the patient received health services. As well, not all physicians who have implemented Electronic Medical Record systems can connect to the provincial databases because of incompatible technology.

A fully operational EHR system depends on the participation of many health-sector organizations, including hospitals, community health agencies, community and hospital medical laboratories, and physicians in community practice, to input the necessary information for sharing. These organizations and professionals would each have invested in their local systems and, while some of these systems would exist even without the EHR initiative, many of these local systems contain health information needed for the provincial EHR systems. Without these local systems and the health information they contain, eHealth Ontario cannot achieve the goal of an EHR initiative.

While the Ministry has a good understanding of the spending on EHR projects managed directly by eHealth Ontario, it has not tracked the total spending on the EHR initiative incurred by other health-care organizations. Spending on projects not managed directly by eHealth Ontario includes, for example, systems used in hospitals and family doctors' offices that contain patient health information.

We used information that the Ministry maintains, along with data we gathered directly from a sample of health-care organizations, to estimate that the cost incurred so far (from 2002/03 to 2015/16) to enable the completion of EHRs across the province is approximately $8 billion.

Because the EHR initiative is still not complete, and lacks an overall strategy and budget (the Ministry only established a budget for eHealth Ontario's portion of the initiative), the Ministry does not know how much more public funding is still needed before the initiative is considered effectively implemented.

Given the continuing importance of having EHRs for the benefit of Ontarians and the health-care system, it is understood that a significant

investment of taxpayer funding is needed to realize benefits to patients and health-care professionals from a provincially integrated EHR system. However, it is equally important that an overall strategy and related budget be in place to ensure that the EHR initiative is appropriately managed and that the intended benefits are achieved in a cost-effective and timely manner.

In addition to the need for a long-term strategy and budget for the remainder of the EHR initiative, it is very important to have full participation of and usage by health-care organizations and professionals because they create clinical information and rely on it to provide quality care to Ontarians. Because most of these organizations and professionals are not accountable to eHealth Ontario, the agency has been unable to fully persuade all parties to contribute clinical information to the EHR systems. As a result, some of the systems that were up and running as of March 2016 contained limited and/or incomplete patient information.

Our specific findings include:

- **More work is needed to enable a functional EHR supported by a province-wide network**—Although approximately $8 billion has been spent so far to enable a functional EHR, parts of the EHRs are still not completely in use and others are only partially functional. This spending covers a 14-year period between 2002/03 and 2015/16, and includes eHealth Ontario's project costs and EHR-related costs incurred in the broader health sector. eHealth Ontario and its predecessor agency spent $3 billion of the total, the Ministry and its funded agencies such as Cancer Care Ontario spent $1 billion, and provincially-funded local health-care organizations such as hospitals and Community Care Access Centres spent about $4 billion. The monies spent covered information technology, the accumulation of information and integrated services required in health-care organizations for sharing through the EHR systems.
- **No overall strategy and budget to guide the implementation of the entire EHR initiative**—In addition to seven eHealth Ontario EHR projects (i.e., Ontario Laboratories Information System; Diagnostic Imaging; Integration Services; Drug Information System; Diabetes Registry; Client, Provider and User Consent Registries; and Client, Provider and User Portals), money is also spent on other projects in the EHR initiative by other health-care organizations through their annual budgets. These publicly funded health-care organizations include hospitals and Community Care Access Centres. The province has not established an overall strategy to guide the work of eHealth Ontario and all other health-sector organizations that must work together to enable a fully functioning EHR system in Ontario. As well, there is also no overall budget for all EHR projects and EHR-related activities undertaken in Ontario.
- **As of March 2016, a year after its deadline passed, seven core projects managed by eHealth Ontario were still within budget but only about 80% complete**—In a June 2010 mandate letter, the government assigned eHealth Ontario 12 EHR projects to be completed by 2015, including seven regarded as core. The government officially approved about $1 billion for the seven core EHR projects under the responsibility of eHealth Ontario, and required the projects to be completed by 2015 (with the exception of the drug information system, which had a 2016 deadline). The actual spending on these seven projects at the time of our audit was within budget. However, in March 2016, eHealth Ontario estimated that it had completed 77% of the seven core assignments. That percentage rises to 81% after taking into account that the scope of some projects changed since 2010 while others were cancelled or reassigned. eHealth Ontario says it expects to fully complete its work

within budget to build the EHR systems by March 2017.

- **eHealth Ontario lacks the authority to require all health-care providers to upload data and the Ministry has not used its authority to require it**—Many factors account for eHealth Ontario's difficulty in completing projects on time. One significant factor is that it has no control over what most health-care organizations do with their own data systems. In effect, eHealth Ontario is mandated to connect these systems, but it has not been given the authority to require organizations to upload necessary clinical information into its EHR systems. As well, the Ministry has not required health-care organizations to participate in the EHR initiative.
- **eHealth Ontario-managed projects contain incomplete data**—Four specific eHealth Ontario projects that we reviewed that were available for use as of March 2016 still lacked some promised features and contained incomplete data. For example:
  - The **Ontario Laboratories Information System**, a database designed to include lab tests done in hospitals, community labs and public health labs, did not have three of the five promised functionalities working at the time of our audit. As a result, health-care professionals were not able to electronically order lab tests for patients, retrieve lab orders, or refer lab tests to other sites or labs if the receiving lab could not conduct the tests. In addition, the database did not contain about 40 million tests, including some conducted either in physician offices or labs in certain hospitals and the community that were not yet contributing to the database, and all those not paid for by the Ontario Health Insurance Plan.
  - The EHR system includes four regional **Diagnostic Imaging databases** across the province to store images such as x-rays and CT scans, and related reports. However, 60% of privately owned imaging clinics do not use digital equipment and so were unable to upload the 5.4 million patient images they create each year. In addition, health-care professionals can only access the imaging database in the region where they practise.
- **$71 million spent on a Diabetes Registry (one of the seven core projects) that was then cancelled**—As part of the EHR project, eHealth Ontario and the Ministry spent $71 million on a province-wide Diabetes Registry, which was to contain information to help treat the growing number of Ontarians with diabetes. However, eHealth Ontario terminated the project in 2012 before it was complete. In our 2012 audit of the Diabetes Management Strategy, we indicated that factors contributing to the cancellation included delays in procuring a vendor and quality issues in the Registry. The $71-million total includes costs associated with an arbitration award to the company developing the Registry after both parties agreed to arbitration.
- **A fully-functional Drug Information System (one of the seven core projects) is not available and is four years away from completion**—The drug information system is used to track dispensed and prescribed medications of all Ontarians. eHealth Ontario was originally responsible for this project, but did not complete it. The Ministry assumed direct responsibility for the project in 2015. By March 2015, the Ministry and eHealth Ontario had spent a combined $50 million on the project. The Ministry has since redesigned the project and expects to complete it by March 2020. It plans to spend an additional $20 million on the first phase, but has given no cost estimate to complete the entire project. As of March 2016, the drug database did not contain information for about 60% of the Ontario population.
- **Utilization of clinical information by health-care professionals below expected**

levels and measurement of system usage was inconsistent—eHealth Ontario reports that many of its systems that have gone online are being actively used, but its definition of "active" was less than stringent. We therefore question whether the utilization rate was actually satisfactory. For example, only 13% of registered users in the Greater Toronto Area accessed lab results and diagnostic images from a web-based viewer in April 2016, compared to a target of 20%. Different systems and databases were subject to different definitions of active use—in some cases, eHealth Ontario reported as "active" someone who used the system once every six months.

Subsequent to our audit, Canada Health Infoway (an organization composed of deputy ministers of health from across Canada) issued a report on October 7, 2016, done at the request of the Ontario Ministry of Health and Long-Term Care, which had asked for an assessment of Ontario's progress on digital health's availability, use and benefits, and how Ontario compares to other provinces and territories.

The report concluded that Ontario is well positioned relative to its peers in terms of availability, use and benefits from investments in digital health solutions. The report also estimated that in 2015, the benefit to Ontario from selected digital health projects was $900 million. The benefits estimate was, for the most part, calculated using a population-based allocation of cross-Canada overall benefits.

Also on October 7, 2016, the Minister of Health and Long-Term Care asked the Premier's business adviser to assess the value of Ontario's digital health program, its assets and all related intellectual property and infrastructure.

3.04 Employment Ontario

Employment Ontario offers a suite of programs designed to provide employment and training services to job seekers and employers, apprenticeship training to students seeking certification and employment in a skilled trade, and literacy and numeracy skills to people who lack basic education necessary for employment. These programs are funded by the Ministry of Advanced Education and Skills Development (Ministry), and the majority are delivered by third-party agencies.

In order to support the Province's economic growth and help ensure Ontarians have long-term sustainable employment, it is important that these programs meet the needs of Ontario's current and future labour market. While Ontario's annual unemployment rate (6.8% in 2015) has generally been in line with the national average, its youth unemployment rate (14.7% in 2015) has been consistently higher than the national average over the last decade by two percentage points.

Our audit found that key programs offered by Employment Ontario are not effective in helping Ontarians find full-time employment. Although the Ministry is redesigning some of its existing programs, more attention is needed to increase their effectiveness and improve efficiency. Specifically, the Ministry needs to take additional steps to increase completion rates for apprentices, and to help people sustain long-term employment in their field of training. We also noted that the Ministry lacks the detailed and timely labour market information necessary to both improve existing programs and develop new ones to meet the current and future labour needs of Ontario. Some of the significant issues we found include:

- **Majority of employment and training program clients unsuccessful in finding full-time employment in their chosen career.** The objective of Employment Ontario's Employment Service program is to find long-term sustainable employment for clients. For 2015/16, at the time of completion of the program, only 38% of clients were employed full-time and only 14% had found employment in either their field of training, a professional occupation or a more suitable job than before the program. Similarly,

in Employment Ontario's Second Career program, which is intended to retrain unemployed and laid-off workers for high-demand jobs, 35% of clients reported being employed when they completed the program, but only 17% were employed full-time, and only 10% were employed in either their field of training, a professional occupation or a more suitable job at time of completion of the program.

- **Overpayments to clients who do not complete programs are not being recovered.** Participants in Employment Ontario's Second Career program who receive funding for retraining but do not regularly attend their program or provide receipts are required to repay the Ministry. In the last three fiscal years, $26.6 million that should have been repaid has been written off as uncollectible.
- **Less than half of the people who begin an apprenticeship program in Ontario complete it.** The average completion rate for apprentices in Ontario (from 2011/12 to 2015/16) was about 47%. Completion rates for voluntary trades were significantly lower than for compulsory trades (35% vs. 59%). Comparable completion results from other jurisdictions were not available because provinces do not follow a single standard method to calculate completion rates for apprentices.
- **Ministry needs to better analyze and address reasons for low apprenticeship completion rates.** The Ministry does not review apprentice completion rates by in-class training provider or employer, and it does not compile and analyze survey results separately (for the majority of questions) for those that completed their apprenticeship program and those that withdrew. Such analyses would enable the Ministry to identify those in-class and on-the-job training providers that may not be preparing apprentices for success, and assess the reasons why apprentices did not complete their apprenticeship. We analyzed apprenticeship completion rates by employer and found that, for employers who have sponsored at least 50 apprentices since the beginning of the program, there were approximately 100 employers that had a low success rate (i.e., less than 20% of their apprentices complete their apprenticeship) but were still actively training almost 4,800 apprentices.
- **Financial incentives to employers may not be encouraging apprentice certification.** In 2015/16, about 60% ($205 million) of all apprenticeship funding was paid to employers through a combination of the Apprenticeship Training Tax Credit, a signing bonus and a completion bonus. The first two financial incentives support apprentices entering the program, but are not tied to employers ensuring apprentices complete the program. The completion bonus, which is more closely aligned with the Ministry's goal of increasing the number of apprentices that get certified, is half the amount of the signing bonus.
- **Number of apprentices at risk of non-completion remains high even after implementation of a monitoring strategy.** The Ministry began monitoring at-risk apprentices in November 2014. At that time, 16,350 apprentices were identified as being at risk of not completing their apprenticeships. About 68% of these cases were resolved by having the apprentice exit the system, in effect cleaning out the Ministry's database. However, by June 2016, the number of apprentices at risk increased to 39,000. Of these, 20,800 were apprentices identified under the same definition as that used in November 2014, and an additional 18,200 apprentices were identified under an expanded definition. Regardless of the definition used, the number of at-risk apprentices has increased during the last 1.5 years since the monitoring strategy was introduced.
- **Ministry's monitoring of apprenticeship training is limited.** Although the Ministry has processes in place to assess an employer's qualifications at the time they submit an

application to train an apprentice, it relies on employers to self-report any changes that may affect their ability to provide sufficient training, such as a change in the number of trainers available to the number of apprentices. Local Ministry offices we visited during our audit confirmed that their involvement with employers is very limited and noted that they visited employers primarily when complaints were received. With regard to in-class training, the Ministry evaluates whether training delivery agents have the tools and resources to deliver courses when they are initially approved for funding, but any monitoring by the Ministry after that point is complaint driven. Ministry staff informed us that they do not directly assess whether instructors are qualified and whether the courses are taught according to the curriculum, nor do they compare the qualification exam pass rates by training delivery agent to identify those with comparatively high failure rates.

- **Ministry lacks necessary data to ensure Employment Ontario programs meet current and future labour needs.** The Ministry does not collect or analyze regional information on labour force skills supply and demand to identify what jobs will have a shortage of skilled workers. According to the Ministry, there are few reliable sector-wide sources of information on employers' anticipated labour needs. The Ministry does publicly report certain labour market information every month (such as unemployment rates by metropolitan areas, and rate of employment growth by highest level of education completed and major occupation groupings); however, this information is not specific to particular jobs or trades to allow for an assessment of the supply or demand for specific occupations. Also, every four years the Ministry reports on the likelihood of people finding employment in various jobs in Ontario. Other provinces, such as British Columbia and Alberta, report projected demand by occupation for a 10 year period that they update annually and biannually respectively.

3.05 Environmental Approvals

Under the *Environmental Protection Act* and the *Ontario Water Resources Act*, anyone who wants to engage in activities in Ontario that release contaminants into the air, land or water—or transport, store or dispose of waste—must obtain an environmental approval from the Ministry of the Environment and Climate Change (Ministry). In this report, anyone releasing a contaminant or pollutant is referred to as an emitter. The *Environmental Protection Act* broadly defines a contaminant to include solids, liquids, gases, odours, heat, sound, vibrations and radiation resulting from human activities that can cause harm to the environment and human health.

In 2010, the Ministry launched its Modernization of Approvals initiative intended to make the environmental approvals program more accessible, flexible and efficient. As part of the initiative, the Ministry:

- introduced the self-registration process for lower-risk activities such as automotive refinishing, non-hazardous waste transportation and commercial printing (prior to this, all emitters had to apply for and receive Ministry approval); and
- implemented an online database of emitters that is intended to allow the public to search for approved emitters within their neighbourhood.

According to the Ministry, air quality in Ontario has improved significantly over the past 10 years due to measures such as the closing of coal-burning plants that resulted in decreases in air pollutants such as sulphur dioxide, volatile organic compounds and fine particulate matter. These decreases are in line with trends in other provinces in Canada. However, according to Environment Canada, Southern Ontario has the highest level of sulphur

dioxide and second-highest level of fine particulate matter emissions compared to four other large Canadian regions.

In addition, based on the most recently available data from Environment Canada, from 2010 to 2012, water quality in 22% of freshwater rivers in Ontario was rated as being less than fair—that is "marginal" or "poor" quality—worse than the national average of 14%. Also, in 2013, Ontario released the largest amount of mercury and lead into its water compared to other provinces, representing 33% and 28%, respectively, of the total national releases.

Overall, our audit found that the Ministry's environmental approvals program is not effectively managing the risks to the environment and human health from polluting activities. The weaknesses we identify below undermine the objective of the *Environmental Protection Act* and the *Ontario Water Resources Act*, which is to protect and conserve the province's natural environment. Specifically:

- **A significant number of emitters may be operating without proper environmental approvals:** While the Ministry has some processes to identify emitters that are operating without the required environmental approvals, its approach is largely reactive. By the time the emitters are identified and the Ministry takes action, the emitters have often been operating without proper approvals for years. The Ministry has not taken a proactive approach. For example, it has not established information-sharing agreements with other Ontario ministries with information on newly operating emitters that could help the Ministry identify illegal emitting activities at an earlier stage. Our analysis of data we obtained from a leading business directory that collects the names of businesses for each business sector indicates that there may be about 12,000 emitters in the province that are not in the Ministry's emitter database. The Ministry has not performed a similar comparison to identify potential emitters that may be operating without a proper approval.
- **Over 200,000 approvals issued more than 15 years ago have not been updated to meet current environmental standards or to reflect emitters' current operations:** Approvals prior to 2000 did not contain many of the operational requirements that similar current approvals include, such as having properly trained staff and well-maintained equipment. The Ministry largely relies on the emitter to request that its approval be updated when it changes its operations, but emitters do not always do so. The Ministry does not know how many of the emitters that were issued those approvals are still operating.
- **The Ministry's monitoring efforts are not sufficient to prevent and detect emitters that violate regulatory requirements and therefore pose a risk to the environment and human health:** Approximately 80% of the 32,500 emitters that have been issued approvals in the last 15 years have never been inspected—despite the fact that there is a high level of non-compliance by emitters that *have been* inspected. For example, in the last five years, 20% of the 4,147 hazardous-waste-related inspections, 35% of the 4,876 air-related inspections and 47% of the 1,228 sewage-related inspections identified emissions in excess of environmental standards. Also, in 2014/15, 63 inspections of automotive refinishing facilities indicated that 86% did not comply with environmental requirements. For example, facilities were closer than the minimum distance of 120 metres from the places where people live, work and play, or they did not retain records of how much air pollution they had emitted.
- **Penalties levied by the Ministry often did not deter repeat offenders:** One-third of the emitters that were issued penalties from 2009 to 2016 were issued penalties for more than three violations. For example, one emitter was issued penalties for 24 violations in eight of the last nine years, totalling more

than $173,000. Another emitter was issued penalties for 13 violations in seven of the last nine years, totalling more than $192,000. The Ministry had not assessed whether its penalties were effective in discouraging individual companies from repeatedly violating environmental regulations.

We also found that, despite being mandated by the Premier in 2014 to "put greater emphasis on the 'polluter pays' principle," the Ministry bears the brunt of the costs of delivering the environmental approvals program, including costs of future clean-up. Specifically:

- **The Ministry only recovers 20% of its cost of delivering the program:** Application and self-registration fees obtained from emitters do not cover all of the Ministry's costs for administering the environmental approvals program. In 2014/15, such fees covered only about 20% of the program's $23 million costs. The application fees have not been updated since 1998.
- **Financial security is not required for many high-risk activities:** The *Environmental Protection Act* gives the Ministry the authority to require financial security from emitters to cover future clean-up costs. However, we found that the Ministry does not always require financial security from high-risk activities such as hazardous waste transporters, industrial sewage systems and other industrial activities that are likely to result in contaminant spills.
- **Financial security amounts collected are less than estimated future clean-up costs:** The amount required from emitters—and imposed as a condition of the Environmental Compliance Approval—is usually based on the most reasonable estimate for future clean-up. However, our review of a sample of emitters has indicated that the Ministry has collected approximately $10 million less than what it estimated would be required for future clean-up.
- **The Ministry is at risk of paying clean-up costs due to outdated remediation estimates:** Even though our audit work indicated that the estimated remediation costs (the costs to reverse or stop environmental damage) could increase greatly over a period of 10 or more years, in many cases the Ministry does not re-evaluate its long-term remediation cost estimates to determine whether it needs to collect more in financial security from emitters to cover the costs. This exposes the Ministry to the risk of having to pay potentially large clean-up costs if the emitter is unable or unwilling to pay for remediation.

With regard to public involvement in the environmental approvals program, we found the following:

- **Public input is blocked for self-registered emitters:** The public does not have an opportunity to provide input on any of the self-registered activities—which include end-of-life vehicle processing facilities (wrecking yards) as well as commercial printing and others—prior to the emitters starting operations. Given that the Ministry—as part of its modernization initiative—plans to convert many more activities that are currently subject to public input to those that are not, opportunities for meaningful public input will be reduced in the future.
- **Public complaints are not well managed:** The Ministry received approximately 78,000 public complaints and reports of contaminant spills in the last five years, which it tracks in a database. However, the Ministry does not consistently follow up on complaints or reports of contaminant spills on a timely basis or categorize them by their underlying problem. As a result, it is not able to identify and act upon systemic issues to improve the environmental approvals process. For example, at the time of our audit, over 1,800 complaints had not yet been assigned to a Ministry field inspector for follow-up. In addition, about 900 complaints

that the Ministry determined to have warranted a field inspection had not yet been addressed.

- **The publicly accessible emitter database is not functioning as intended:** The publicly accessible emitter database maintained by the Ministry cannot perform the basic searches for which it was designed, such as searching for emitters in a particular neighbourhood.

The Ministry does not know whether its environmental approvals program is effectively regulating polluting activities and how much impact such activities have on human health. In particular, self-registered emitters are not required to provide the Ministry with emissions information. This results in the Ministry not knowing whether levels of pollution from these activities are above approved levels. At the same time, when the Ministry does receive emissions information from higher-risk emitters, it does not assess the environmental and health impacts of those emissions within various regions of the province. Instead, each emitter's data is only reviewed by the Ministry for compliance with its environmental approval limits.

3.06 Environmental Assessments

An environmental assessment is a planning and decision-making process that evaluates the potential "environmental impacts" of a proposed project or plan. This process is required under the *Environmental Assessment Act* (Act), primarily for public-sector projects and plans. The intent of the Act is to establish a process that identifies and resolves potential environmental problems before actual environmental damage occurs, for the betterment of Ontarians. Environmental assessments are intended to identify ways to prevent or mitigate negative effects of projects and plans, and find alternatives and consider public concerns prior to going ahead with the project or plan.

The Ministry of the Environment and Climate Change (Ministry) is responsible for administering the Act. The scope of "environmental impacts" under the Act is broad: in addition to the impact on the natural environment, it includes human life, social, economic and cultural factors that influence a community. The Act also allows for most environmental assessments to be "streamlined"—that is, subject to pre-set and less rigorous processes for projects considered to be routine and to have predictable and manageable environmental impacts.

Overall, our audit found that Ontario's environmental assessment process needs to be modernized and aligned with best practices in Canada and internationally. Because the Act is 40 years old—and is, in fact, the oldest environmental assessment legislation in Canada—it falls short of achieving its intended purpose. For example:

- **Ontario is the only Canadian jurisdiction in which environmental assessments are generally not required for private-sector projects.** These projects—such as mining operations or chemical manufacturing facilities—proceed without an up-front evaluation of the environmental impacts of the project. Such impacts can be extensive and can affect Ontarians for many years. For example, as of March 31, 2015, the government identified that it had a liability of $1.2 billion to clean up 47 contaminated sites that were caused by mining in Ontario over the years. (See **Section 3.10** Management of Contaminated Sites in our *2015 Annual Report*.) With over 4,400 active and abandoned mine sites and 15,000 recorded mine hazards, MiningWatch Canada reports that Ontario ranks first in Canada as having the biggest environmental liability in the mining sector.
- **Environmental assessments are not completed for many significant government plans and programs.** The impact of government plans and programs can have a broader and longer-term impact compared to individual projects, and therefore warrant a thorough assessment beyond that which is possible for individual projects. Although the Act applies to government proposals, plans

and programs, only streamlined assessments have been conducted, and only for forest-management plans. No other environmental assessments have been completed for any government plan or program in the last two decades. This is because:

- **The Act is not specific about the types of plans and programs that must be assessed.** This means that determining whether a government plan—for example, the province's Long-Term Energy Plan and the Ministry's cap-and-trade program—requires an environmental assessment is open to interpretation by the provincial ministries and agencies that propose the plan.
- **Other legislation undermines the role of environmental assessments by exempting certain plans and programs from requiring them.** For example, the Climate Change Action Plan, transportation plans, and the government's renewable energy program are exempt from requiring an environmental assessment. In reaction to this, 92 municipalities have passed resolutions as "unwilling hosts" to wind farm developments. These resolutions do not have the authority to stop any wind farm development projects.

Public consultation is one of the cornerstones of the environmental assessment process. Prior to passing the Act in 1976, the government emphasized the important role the public can play in identifying potential impacts, assessing their significance, and evaluating the advantages and disadvantages of a project or plan. However, the benefits of public input have not been realized because:

- **Decisions regarding whether to grant public requests for more extensive consultation are at the Minister's discretion, with no clear criteria or an independent body to ensure objectivity.** In the last five-and-a-half years, the Minister has denied all but one of the public requests to have 177 streamlined assessments "bumped up" to comprehensive assessments. Also, the Minister has denied all 190 public hearing requests related to four projects (Durham and York Energy Centre, Hanover/Walkerton Landfill Expansion, West Carleton Environmental Centre, and Highway 407 East Extension). Clear communication about why requests were rejected would instill more public confidence in the environmental assessment process.
- **The public is not informed about most projects.** The majority of projects undergo the less rigorous streamlined environmental assessment process that includes about 30 days of public consultation. The Ministry's website only has information about projects undergoing comprehensive environmental assessments. Neither the project owners nor the Ministry provide the public with information about streamlined assessments beyond this brief consultation period.

Neither the comprehensive nor the streamlined process is effectively or efficiently overseen by the Ministry. As a result, the public obtains minimal assurance that these processes are effective in preventing and/or mitigating the negative environmental impacts of projects.

Other significant observations include the following:

- **The type of assessment required for a particular project is often not based on the project's potential environmental impact.** For example, the basis for determining whether a comprehensive or a streamlined assessment is required for a particular project often depends on its size, scale and cost rather than its potential impact.
- **The Ministry has no assurance that streamlined assessments are conducted properly because of its limited involvement.** Many streamlined assessments are completed without the Ministry's knowledge—including, for example, 80% of those conducted by

the Ministry of Transportation in the last five years. Without knowledge of these assessments, Ministry staff cannot provide input into these assessments. In cases where the Ministry was aware of the projects and had reviewed the assessments, deficiencies were identified in more than half the assessments, indicating that project owners were not always conducting them properly.

- **Lengthy Ministry reviews of public requests to bump up streamlined assessments to comprehensive assessments cause unnecessary project delays.** Multiple layers of reviews—including four levels of sign-off by the Director, Assistant Deputy Minister, Deputy Minister and the Minister— resulted in an average of seven months of delays, but did not substantively change the outcome of the review. The additional reviews generally only resulted in grammatical wording changes or merely restated existing commitments in the environmental assessments. Projects were delayed until all reviews were completed, which often resulted in financial and non-financial costs to project owners.
- **The cumulative effects of multiple projects are usually not assessed.** Despite international best practices, project owners are not required to consider the cumulative effects of other relevant activities such as known future projects and those that are already occurring in the project area; this can result in projects going ahead in areas that are already subject to significant environmental stresses.
- **The Ministry does not have effective processes to ensure that projects are implemented as planned.** Such processes could include field inspections during project implementation or requesting data, after projects are implemented, that shows their environmental impact.

3.07 Housing and Supportive Services for People with Mental Health Issues (Community-Based)

The shift from institutional to community mental health services and supports that began in the late 1990s and continued in the decade that followed has increased the need for mental health supportive housing in Ontario. Under four supportive housing programs funded by the Ministry of Health and Long-Term Care (Ministry), the Ontario government subsidizes over 12,300 housing units and funds support services to individuals with serious mental illness who have housing needs. Mental health supportive housing is especially important to those who are homeless or staying in places that may not be promoting their recovery, or who have just been discharged from hospitals. The programs are delivered by mental health housing and support services agencies that contract with the Ministry and/or the Local Health Integration Networks (LHINs) that have a mandate to plan, fund and integrate health services, including mental health services, in 14 geographic areas within Ontario.

Supportive housing includes two components—housing and support services. The Ministry funds and monitors housing, while the LHINs fund and monitor support services. Support services are provided to help housing clients cope with their mental illness and stay housed. They may include case management, counselling and vocational supports. Housing agencies deliver these services to their clients either on their own or in partnership with other mental health agencies.

In 2014, the Ministry created the Mental Health and Addictions Leadership Advisory Council (Council) to help the government move forward with its mental health and addictions strategy, *Open Minds, Healthy Minds*, which was launched in 2011. The Council considers supportive housing a priority area, and will be making recommendations to the Ministry by 2017 on actions needed to meet the objectives of the strategy.

Providing supportive housing for people with mental health challenges who require housing makes economic sense. With the right housing and supports, people recovering from mental illness gain a renewed sense of dignity and hope, and can reintegrate into the community more successfully. Research shows that providing a home to people with mental health challenges can help save money in the long run in hospital, prison and shelter stays, and in other ways as well. One study found that for every $10 invested in housing and supporting a client, an average saving of $15.05 for a high-needs client and $2.90 for a moderate-needs client can be realized.

Our audit found that the Ministry, the LHINs and service providers do not have adequate information, systems and procedures in place to cost-effectively oversee, co-ordinate and deliver housing with support services to people with mental illness. They also do not sufficiently measure and publicly report on the effectiveness of Ontario's mental health supportive housing programs. Consistent with concerns our Office raised in previous audits of community mental health in 2002 and 2008, and our subsequent follow-up on the latter audit in 2010, we continue to find that the Ministry does not have consolidated information on the demand for mental health supportive housing in the province, does not assess the cost-effectiveness of the four mental health housing programs (as described in **Chapter 3, Section 3.07, Appendix 1**), and does not measure the outcomes of individuals housed. Similarly, LHINs do not know what types of support services are provided to housing clients on an annual basis, how effective they are, and whether clients are satisfied with supportive housing. The lack of a housing policy framework to guide the provision of mental health supportive housing contributes to the Ministry's and the LHINs' difficulty in sufficiently overseeing and co-ordinating the delivery of supportive housing services to Ontarians.

We also found that clients living in ministry-funded housing may not be receiving similar services across the province. As well, without information on the demand for mental health housing the Ministry cannot set and has not set any goals for how many mental health supportive housing units are to be made available to those in need, and has not developed a housing policy, despite having identified this as an area of need in its own 1999 mental health policy framework. We also found that without standards and expectations, the Ministry cannot reasonably ensure that its funding is contributing to good-quality supportive housing services that meet the needs of clients. Similarly, LHINs have not prescribed the types and duration of support services that should be available to housing clients at different points in their recovery path, and do not require agencies to report aggregate client assessment information to determine areas of unmet needs.

Providing mental health housing with support services can help reduce inequities and allow people living with mental illness to reach their full potential. With limited resources available, the province needs to make careful choices to provide mental health supportive housing to those who would benefit most from it. This could mean some who are currently receiving mental health supportive housing might need to transition to other forms of housing, such as those that are not tied to support. Doing so would help the Ministry focus on providing the available housing and supports to those who have nowhere else to go and have the greatest need for mental health supportive housing, so they can have a better chance to move on with their lives. But it is important that governments have plans in place to connect clients who could live independently to community support services should they need them over the course of their lives, regardless of where they live. This approach has been in place in parts of the United States and has resulted in people continuing to live independently for years after they initially received mental health supportive housing.

Following are some of our significant observations:

- **The Ministry identified the need to develop a policy on housing as early as 1999, but no**

such policy has been developed since then. The Ministry and three other ministries (the Ministry of Housing, the Ministry of Children and Youth Services, and the Ministry of Community and Social Services) together operate 14 housing programs in Ontario. Some of these serve seniors, victims of violence and people with chronic illnesses. In 2014, the four ministries together began to transform this fragmented housing system in the long term. At the time of our audit, the four ministries were working on a supportive housing framework to guide better alignment of existing and/or planned housing initiatives; they intended to release it publicly by early 2017. Since the ministries expect to implement the framework in 10 years, changes in the housing system may not be completely realized until almost three decades since the Ministry first identified the need for a housing policy.

- **The Ministry does not have consolidated regional or agency wait-list information.** Not all LHINs have regional wait lists, and the Ministry does not require housing agencies to maintain wait lists. Without a clear picture of the need for mental health supportive housing in each LHIN region, the Ministry cannot effectively plan for the allocation of housing stock in the province. In any event, the Ministry does not set goals with timelines on how many mental health supportive housing units it needs to fund in the long run.
- **People usually move from the wait list into available housing in the order in which they applied.** People who are ready to be discharged from hospitals but have nowhere to go do not get priority over others in accessing mental health supportive housing, even though the cost of a hospital bed can be as much as nine times the cost of providing supportive housing. Also, those with a higher level of needs, such as 24/7 care including meal preparation or medication management, have difficulty getting into the first available housing because not all units are structured to allow for such levels of care. Individuals who have mobility issues also tend to have longer waits because some units are not outfitted with accommodation that would meet their needs. Meanwhile, shared units remain vacant for up to 39 months because clients usually prefer not to share a unit. The Ministry does not know how many shared units it funds in Ontario.
- **The Ministry considers mental health supportive housing as long term and permanent.** Clients living in Ministry-funded supportive housing consider their house or unit their permanent home. But some supportive housing clients no longer need or want support services. This practice contradicts the principle of supportive housing, which includes an element of support services. One housing agency we visited proposed to the Ministry that there be a continuum of housing, so individuals whose level of support needs changes over the course of tenancy can step up to higher-support housing if necessary, or transition to other settings, such as the private market or social housing, once they stabilize. However, at the time of our audit, the Ministry had not provided any direction to agencies to guide transitioning efforts.
- **The Ministry's approach to mental health supportive housing by default creates a backlog in accessing available housing.** There is no certainty on when occupied units will next become available since supportive housing is permanent housing. Wait times to access mental health supportive housing can be up to seven years in the regions we visited.
- **The Ministry is starting to make progress in updating two older housing programs (Homes for Special Care and Habitat Services) that no longer follow best practices.** Eighty percent of the units in Ontario's mental health supportive housing are provided to individuals living with mental illness under two of the four ministry-funded mental

health supportive housing programs, where not-for-profit agencies either own the units, purchased with government funding, or rent from the private market with subsidies from the Ministry. The remaining 20% of the units are in these two older programs that were created decades ago and do not follow current best practices, as they primarily provide room and board only but no significant rehabilitative support services. At the time of our audit, the Ministry was beginning to review one program, and has allowed changes to the other. We are encouraged to see the Ministry go in this direction, having previously noted in our 1987 audit that residential care homes (which primarily provide room and board) for the mentally ill were not the best housing choice given that they were not required to provide support services.

- **The Ministry's subsidy payments to agencies may not be appropriately geared to tenants' ability to pay their rent.** The Ministry paid just over $100 million in 2015/16 to housing agencies to operate over 12,300 housing units in Ontario, but did not appropriately monitor whether agencies verified tenants' income levels. We found that income was not verified at the required intervals at six of the seven housing agencies we visited. As well, the Ministry did not require housing agencies that own properties containing housing units to conduct building-condition audits, which would have informed both the agency and the Ministry if the capital reserve is in an unfunded liability position (meaning that the agencies lack the reserve funds to pay for needed major repairs and renovations). This could potentially raise issues of safety for clients living in these buildings, and financial exposure for the Ministry, which funds the capital reserve.
- **LHINs do not confirm whether appropriate support services are delivered to housed tenants.** LHINs do not know whether agencies provide these various support services, whether all housing clients receive support services, and whether clients living in one area of the province receive comparable service hours to clients with similar needs living in another area. LHINs give agencies full discretion to deliver to their housing clients whatever support services they deem proper and at whatever frequency and level of service.
- **The Ministry does not collect outcome information on housing clients to determine whether clients live independently and achieve recovery.** The Ministry collects output-based information, such as how many units are occupied but does not collect outcome data, such as if clients' visits to hospitals or encounters with the justice system have decreased, or whether their ability to function has improved. The need to collect outcome data has been identified in many public reports, including the 1999 government implementation plan for mental health reform, and the 2010 report by the Ontario Legislature Select Committee on Mental Health and Addictions. The Mental Health and Addictions Leadership Advisory Council noted in 2015 that it will work on creating a common data set. In other words, the issue of not having outcome data is still not resolved almost two decades after the government itself acknowledged this concern.

In the last three years, the Ministry has been moving in the right direction—it established a cross-ministry working group and a leadership advisory council to address specific issues with mental health supportive housing. But these issues, in areas such as the types of support services, outcome data, housing model and best practices sharing, have already been identified in many provincial reports on mental health in the last three decades. The Ministry and the LHINs can take guidance from these reports to implement changes in the way they plan, oversee and fund mental health supportive

housing to ensure housing and support services providers deliver the program to clients requiring such services in a purposeful way.

3.08 Large Community Hospital Operations

Ontario's network of 147 public hospitals includes 57 large community hospitals, along with small community hospitals, teaching hospitals, chronic-care and rehabilitation hospitals, and speciality psychiatric hospitals.

Large community hospitals are distinguished from the others by the high number of patients they treat. The Ministry of Health and Long-Term Care (Ministry) defines large community hospitals as those with 2,700 or more acute and day-surgery weighted cases in any two of the prior three years.

The 57 large community hospitals account for about 14,990 of Ontario's 31,000 hospital beds—or 48%.

This audit examines operations at three large community hospitals, each governed by a different regional authority (called a Local Health Integration Network, or LHIN).

Each of the three hospitals treats acute patients at two different sites and, together, the three hospitals accounted for $1.3 billion in Ministry funding, or 16% of the $7.89 billion total funding to large community hospitals in 2015/16.

Our audit was primarily based on data we collected at the hospitals we visited. However, to better understand all large community hospitals, we also did a survey of the 54 other hospitals in this category, and reviewed available aggregated data for all 57 large community hospitals.

In certain areas—those related to surgical-safety performance and infection rate, for example—we reviewed provincial data that covers all 147 public hospitals, because the data was not broken down by hospital type (such as large versus small community hospitals).

Typically, nine out of every 10 patients who go to a hospital leave the hospital after being diagnosed and treated in the emergency room. At the three large community hospitals we visited, we found that half of these patients are treated and are able to leave the hospital within three hours. However, we also found that the one in 10 patients whose conditions were serious enough to warrant admission to hospital for further treatment waited too long in the emergency room.

Our audit also found various key factors that are hindering patient care in hospitals. These include scheduling operating rooms and surgeon time in a way that makes it difficult for hospitals to respond to unexpected emergency surgical cases in a timely manner; letting surgeons book elective surgeries when they have on-call emergency duties; the lack of a centralized system to book patients on long wait lists for surgeries within the same region; rigid scheduling practices that limit the availability of physicians, operating rooms and beds; funding uncertainties; and certain faulty quality-of-care practices that can lead to health problems and risks in hospitalized patients.

Among our findings:

- **Patients waiting too long in emergency rooms**: Many patients with conditions serious enough to require hospital admission wait excessive periods in emergency rooms—much longer than the Ministry-set target of no more than eight hours from triage (prioritizing patients according to the urgency of their conditions) to being transferred to intensive-care units or other acute-care wards. (The Ministry target is set for the 90th percentile. This means that 90% of patients should be transferred within eight hours, and no more than 10% should wait any longer.) In 2014/15, at the three hospitals we visited, only 52% of patients were transferred to intensive care in eight hours, not 90%; the 90th percentile wait time (after the 10% of patients with the longest wait times are removed) was 23 hours, not eight hours. The same year, only 30% of patients at the three hospitals we visited were transferred to other acute-care wards in eight

hours, not 90%; the 90th percentile wait time was 37 hours, not eight hours.

- **Operating rooms not fully utilized**: Although most hospital sites we visited have nine to 12 operating rooms, only one at each site remained open evenings, weekends and statutory holidays for emergency surgery only. Our survey also found that most hospitals have planned operating-room closures over March break and for two to 10 weeks during the summer. This was despite the fact that many patients had been waiting a long time for elective surgery.
- **Long surgical wait times put patients at risk**: At the three hospitals we visited, one in four patients with critical or life-threatening conditions had to wait four hours on average for surgeries that should have started within two hours. We also noted that 47% of patients who should have undergone emergency surgery within two to eight hours had to wait on average more than 10 hours longer. For example, we noted that one patient who had suffered a traumatic brain injury waited 21.5 hours to receive a surgery. This patient had been assessed by a surgeon upon arrival at the emergency room and subsequently reassessed, by the same surgeon and another surgeon, to be clinically stable. However, two elective surgeries were prioritized to be completed before this case. During the waiting period, the patient's condition deteriorated rapidly and they went into a coma. The patient did not recover from the emergency surgery and died four days later.
- **Emergency surgical patients not always given priority**: Emergency surgeries have to compete with elective surgeries for operating-room time, resulting in long wait times for patients requiring emergency surgeries. All three hospitals we visited have policies that allow the most critical emergency surgeries to bump all others. However, other types of emergency surgeries typically have to wait until after hours, when that day's elective surgeries have been completed, or for a weekend slot. For example, a patient suffering from abdominal pain waited 25 hours before receiving surgery. The patient was diagnosed with acute appendicitis after a 7.5-hour investigation in the emergency room and waited another 17.5 hours from the time a decision was made that surgery was necessary to the time a surgery was performed. The patient's appendix ruptured during the waiting period, and had to stay in the hospital twice as long as expected due to a surgical complication.
- **Patients waiting too long for some urgent elective surgeries**: We reviewed wait times for elective surgeries at all 57 large community hospitals, and noted that they had not improved in the five years leading up to 2015/16. We also noted that some large community hospitals are struggling to meet the Ministry's wait-time targets for the most urgent elective surgeries—for example, only 33%, not 90%, of urgent neurosurgeries were completed within the Ministry's 28-day target. In addition, patients in a certain part of the province waited almost a year for cataract surgery without being given the option of having it done earlier elsewhere, because there is no centralized referral and assessment system for each type of surgery in each region.
- **Year-end funding confirmation for cancer surgeries not timely**: The Ministry provides funding for cancer surgeries based on projections submitted by hospitals. At one hospital we visited, the hospital spent over $3.7 million on cancer surgeries, which was about $321,000 more than its mid-year projection. However, the Ministry did not confirm with this hospital that it would receive additional funding for the shortfall until six months after the March 31, 2016, year end due to the timing of the hospital data reporting and reconciliation process. This delay has created funding uncertainty and made it difficult for

the hospital to plan and forecast in the current fiscal year and in the development of the future year's operating budget.

Another area of concern in our audit was patients developing new health problems as a result of their hospital stay. For example:

- **Patients discharged from Ontario hospitals had a relatively high incidence of sepsis**: Sepsis occurs when the body's fight against infection actually harms the patient, and can result in death. Canadian Institute for Health Information data for March 2015 shows Ontario hospital patients had the second-highest rate of sepsis in Canada (after the Yukon): 4.6 cases per 1,000 patients discharged, compared to an average of 4.1 for the rest of Canada. Bed occupancy rates of 85% or higher contribute to the likelihood of infection while in hospital. During 2015/16, 60% of all medicine wards in Ontario's large community hospitals has occupancy rates higher than 85%.
- **Alternate-level-of-care patients suffer from relatively high incidences of falls and overmedication**: At one of the hospitals we audited, senior alternate-level-of-care patients (that is, patients who no longer require hospital care but must remain there until a bed becomes available in another care setting) fell 2½ times more often than residents of long-term-care homes in the same LHIN area between January 2014 and March 2016. We also found that 37% of these patients were given anti-psychotic drugs in 2014/15, compared to 31% at the long-term-care homes in the area and 27% at long-term-care homes province-wide. (The other two hospitals did not track, on an aggregate level, falls and anti-psychotic drug therapy for their alternate-level-of-care patients.)
- **Ontario patients have relatively high incidences of health problems and risks that could be better managed with better quality-of-care practices**: We identified three health problems that Ontario hospitals do not manage or prevent as well as hospitals outside Ontario:
  - *Post-operative pulmonary embolism:* A pulmonary embolism is a blockage in the lung, often caused by a blood clot, that can damage the lung and other organs, and even lead to death. Leg or hip surgery is one of the risk factors for blood-clot blockage, as is having to stay in bed after surgery. There are ways to predict its likelihood and prevent clots after surgery, including medication and making the patient active as soon as possible after surgery. Ontario hospital patients aged 15 or over have a relatively high incidence of post-operative pulmonary embolism after hip- and knee-replacement surgeries: 679 cases per 100,000 patients discharged, compared with 660 Canada-wide and 362 for the 34 other Organisation for Economic Co-operation and Development (OECD) countries.
  - *Objects left inside surgical patients:* Objects such as sponges or pieces of other medical tools that are inadvertently left in a patient after surgery can cause internal bleeding, infections, other complications or death. Ontario surgical patients aged 15 or over experienced a higher rate of errors: 7.5 per 100,000 discharges, compared with 4 for the 34 other OECD countries (the Canada-wide rate is 8.6).
  - *Vital life-saving medical equipment not adequately maintained:* Medical equipment such as ventilators, anesthesia units and defibrillators are used to keep patients alive. Like any complex machinery, they need to be regularly maintained or serviced to work properly; otherwise, they can fail, putting patients at risk. We found that at one hospital we visited, 20% of the equipment was not being maintained according to schedule; for some equipment, the last required maintenance was two years overdue. At another,

only 53% of the equipment was being maintained according to schedule; 30% of the equipment received maintenance late, and 17% had received no maintenance.

Among our other findings:

- Hospital decision-making on patient care has been negatively impacted by the physician appointment and appeal process. We noted some instances where hospitals were not able to resolve human resources issues with physicians quickly because of the comprehensive legal process that the hospitals are required to follow under the *Public Hospital Act*. In some cases, longstanding disputes over physicians' hospital privileges have consumed considerable hospital administration and board time that could be better spent on patient care issues.
- As of March 2016, about 4,110 alternate-level-of-care patients were occupying hospital beds even though they no longer needed them. About half are waiting for long-term-care-home beds because there are not enough available in the community. We calculated that hospitals could have treated about 37,550 more patients if these alternate-level-of-care patients were not waiting in the hospital. Hospital beds are also more expensive than long-term-care beds. We estimated the additional cost to be $376 million in 2015/16.
- The three hospitals we audited do not have adequate access controls over private patient information. We found computer accounts still active for people no longer employed, computers without automatic logout function and unencrypted portable devices.
- None of the hospitals we visited had a centralized scheduling system to efficiently track and manage scheduling for all nursing units. As a result, nurses worked significant amounts of overtime, with a correspondingly significant number of sick days. We found that two of three hospitals do not conduct a thorough analysis to evaluate the costs and benefits of using agency nurses versus hiring additional full and/or part-time nursing staff. Although the third hospital has conducted a cost-benefit analysis on the use of agency nurses, the agency costs at this hospital had more than tripled in the last four years.

3.09 Metrolinx—Public Transit Construction Contract Awarding and Oversight

Metrolinx is an agency of the Ministry of Transportation responsible for operating a network of train and bus routes across more than 11,000 square kilometres (km) in the Greater Toronto and Hamilton Area. Currently valued at $11 billion, Metrolinx uses about 680 km of railway track on seven train lines, 66 train stations and 15 bus terminals. In total, about 69 million passenger boardings occur annually on Metrolinx vehicles.

Metrolinx was established in 2006 as a planning agency, and then merged in 2009 with GO Transit (GO), which had been operating the regional transit system since 1967. With this merger, Metrolinx became responsible for operating, maintaining and expanding GO's network of trains and buses. Expanding public transit capacity is a high priority for Metrolinx: under the government's 25-year "Big Move" plan, announced in 2008, about $27 billion is earmarked for new public transit infrastructure over the next 10 years.

In the past five years, Metrolinx has completed about 520 construction projects costing a total of about $4.1 billion. The average cost of these projects was about $8 million. These projects included building new parking lots, expanding GO railway tracks, building tunnels and bridges for trains, and upgrading existing GO stations.

Metrolinx's construction projects proceed differently depending on the contractor Metrolinx works with. Of the $4.1 billion Metrolinx spent over the past five years, about $3.4 billion (82%) was on projects where Metrolinx contracted out all of the work. That is, external firms designed the project,

constructed it and oversaw it. For almost all of these projects, Metrolinx contracted with a separate company to design the project and a different company to construct it (this is the traditional model for delivery of construction projects).

The other $725 million (18%) of construction dollars Metrolinx spent in the past five years was paid to Canada's two major railway companies—the Canadian National Railway (CN) and the Canadian Pacific Railway (CP). When GO was first established, it used existing CN and CP track. As demand for GO train service increased, GO bought as much CN and CP track and surrounding land that it could. When CN and CP would not sell land to GO, GO paid them to construct more track lines on their land and paid them, as per the terms of their agreement, to use the lines. This continued after Metrolinx assumed responsibility for GO. Thus, Metrolinx has had to hire either CN or CP as the sole contractor for these projects on CN and CP land.

Our audit found that Metrolinx does not have adequate processes in place to consistently ensure value for money in its delivery of construction projects. Because of deficiencies noted in its oversight processes around construction contracts, and because of deficiencies we confirmed in a sample of contracts, there is a risk that it is spending more than what is required, and there remains a significant risk that this will continue to happen.

Metrolinx continues to award contracts to poorly performing contractors that submit the lowest bids—it does not track contractors' past performance and does not consider contractors' ability to deliver completed projects on time, which has resulted in Metrolinx incurring additional costs. Metrolinx has had many years to implement a contractor performance-management system but still has not done so.

For contracts with CN and CP, Metrolinx does not do work to know that it is getting what it pays for: it does not verify charged costs; it does not ensure that charged costs are reasonable; when it requests that the parts on a project be new, and pays the cost of new parts (as opposed to less expensive recycled ones), it does not require that parts be checked to ensure that they are new. It has also been paying excessively high mark-up rates charged by CN for building new rails for Metrolinx (CN's mark-up rates are specified on its invoices, while CP's are not as clear).

Our specific observations are as follows:

Metrolinx Rarely Holds Design Consultants and Construction Contractors Accountable When They Deliver Work That Is of Poor Quality and/or Late—and It Continues to Award Them More Work.

- **Design consultants' errors and delays result in additional costs to Metrolinx, yet Metrolinx takes little action to recover costs and prevent this from reoccurring.** Metrolinx allows design consultants to produce designs that are not feasible to construct, contain errors, misestimate the quantity of materials required, or omit specifications—all with no repercussions. Because designs created by consultants are used by the contractor to calculate bid prices, they need to be free of error; otherwise, there can be considerable cost overruns during construction. Also, since construction cannot begin until the design is finalized, design delays can significantly impact the overall project time frame and cost. In our review of a sample of Metrolinx project documents from the past five years, we noted that consultants made frequent errors in their designs. In one project alone, errors made by the consultant caused a project to be over budget by 35%, or $13.6 million, a cost that Metrolinx had to pay as a result of the design not including all final requirements. In a sample of six projects whose total initial construction costs were over $178 million, $22.5 million *more* had to be spent just because of the design consultants' errors and omissions. There were no repercussions in

these cases, and Metrolinx did not factor in this poor performance when selecting these design consultants for future projects.

- **With the exception of two contractors, Metrolinx does not appear to be addressing problems caused by construction contractors that have a history of poor performance on Metrolinx projects.** A contractor might repeatedly be late in delivering work, not construct the project according to the approved design, not follow safety regulations and/or not fix deficiencies on time—yet Metrolinx will hire the contractor for future projects, provided it is the lowest bidder. Only in the cases of two contractors did Metrolinx take past unacceptable performance into consideration. For example:
  - **One contractor was awarded 22 more projects after performing poorly for Metrolinx.** We noted that Metrolinx issued a letter of default to a contractor in 2009 because construction workers had not even shown up on the project site for several weeks. Despite this, since then, Metrolinx has awarded this contractor 22 more projects worth a total of $90 million. We reviewed the contractors' performance on a few of these 22 projects and noted that project staff continued to rate its performance as poor. For example, on a project in 2012, this contractor installed several pieces of substituted equipment and building materials that were not approved in the contract (the substitutions were caught by Metrolinx only after-the-fact). On another project in 2013, this contractor took six months, after it had already completed the project, to fix its deficiencies—one significant deficiency was the absence of a functioning camera and surveillance system that posed a safety risk to commuters using the station.
  - **Metrolinx terminated a contract with another poorly performing contractor, paid it almost the full amount, and then re-hired it for another contract.** Metrolinx hired the same contractor for Phase 2 of a project to install external cladding (cover) for a pedestrian bridge over Highway 401 even though the contractor had performed extremely poorly on Phase 1. The contractor again had performance issues on Phase 2: it significantly damaged glass covering the bridge, and Metrolinx estimates it will cost $1 million to replace the glass. Metrolinx terminated the contract with the contractor because of performance issues, even though the construction had not been completed, and paid the contractor almost the full $8 million of its contract. We noted that, after performing poorly on both Phase 1 and Phase 2, Metrolinx still awarded this contractor another major project valued at $39 million (to build a new platform at a GO station).
- **Late construction projects have resulted in additional costs, yet Metrolinx rarely takes action against contractors for not delivering on time.** Even though Metrolinx incurs significant costs because of contractors completing projects late (anywhere from four months to 25 months), it seldom takes action against contractors that do not deliver on schedule. For example, on one project alone, Metrolinx paid consultants over $350,000—or 160%—more than budgeted to oversee this project because the contractor was 25 months late in completing the project. In a sample of eight projects whose total initial budget for oversight services was $1.35 million, over $2 million *more* had to be spent because of how late contractors were in completing their projects. That is 150% more than the initial oversight budget total. Although Metrolinx could charge contractors "liquidated damages"—a pre-determined amount included in contracts to cover additional oversight costs if a project is late—it has

not always included them in its contracts to allow it to charge liquidated damages. As well, based on information provided to us by Metrolinx, Metrolinx has rarely sought action against contractors for the recovery of additional costs.

- **Metrolinx does not take action against contractors that breach safety regulations during construction.** Metrolinx rarely takes into account whether contractors breached safety regulations that resulted in unsafe site and working conditions when awarding future contracts. We found that even when a contractor has caused safety issues to the public as well as construction workers, Metrolinx has taken no action against it, and has continued to award it future contracts. We noted that in *all* of Metrolinx's audits of compliance with safety regulations at construction sites over the past three years, contractors breached regulations. Instances were found where contractors frequently erected unsafe scaffolds, or improperly labelled and stored flammable materials. Metrolinx informed us that the contractor, upon Metrolinx's request, had stopped the unsafe behaviour right away; however, we noted that there were no follow-up audits to determine whether the contractor continued to breach safety regulations, nor any repercussions for the contractor for its unsafe actions.
- **Metrolinx is not diligent in ensuring that contractors fix deficiencies in their work in a timely manner.** In three-quarters of the projects we reviewed, we noted that contractors took much longer than the industry standard of two months to fix all deficiencies. On average, these contractors took almost eight months to fix outstanding deficiencies.
- **Metrolinx has not addressed the risk of poorly performing sub-trades being selected by the contractor.** Metrolinx allows contractors to subcontract up to 100% of the work on their projects. Metrolinx has experienced significant issues with sub-trades—to the extent that its staff have requested that Metrolinx pre-screen sub-trades to ensure that those with a poor work history do not jeopardize project timelines.

Metrolinx's Accounting System Allows Payments to Exceed Projects' Approved Budgets

- **Metrolinx does not have, in its enterprise management system, a control in place to ensure that payments exceeding approved budgets have been approved for over-expenditure.** As a result, project staff must manually keep track of project expenditures to ensure that they are within the budget. However, we found that they are not always properly doing this. In one instance, in March 2013, Metrolinx issued a contractor two payments totalling $1.2 million over the project's approved $17 million budget without having authorization to exceed the budget. Three years later, on the same project, the same problem occurred again: Metrolinx made three payments totalling $3.2 million over the approved budget without prior authorization.

Metrolinx Has Not Managed Its Relationship with CN and CP in a Way that Ensures Value-for-Money for Ontarians

- **Metrolinx pays CN and CP without verifying most costs.** Metrolinx's projects with CN and CP are costed in one of two ways. With some CN projects, CN provides an estimate of the total costs, and that estimate becomes the lump-sum amount Metrolinx ultimately must pay for the project. With other CN projects and almost all CP projects, CN or CP invoices Metrolinx based on the project's time and materials. In all cases, Metrolinx pays CN and CP without verifying most costs:
  - We found that Metrolinx does not do sufficient work to determine if the estimated lump-sum costs on CN projects are reasonable. We also noted instances where

Metrolinx paid for costs unrelated to its projects, such as costs for maintaining CN railway track.

- We similarly found that Metrolinx does not verify whether invoices billed by CN and CP actually relate to work done on Metrolinx projects. For example, we found several CN charges to Metrolinx for work CN had done on track that it owned that GO Trains never use. Metrolinx does not have a site inspector at CN or CP to ensure work done by the railways, and, although it has the ability to audit invoices under its agreement with CN, it does not do so.
- Compared to other rail companies that work for Metrolinx, CN charged Metrolinx significantly higher materials and labour costs. Specifically, materials costs were about 60% higher and labour costs were 130% higher. Information on CP's costs were not detailed enough to allow us to perform the same comparison.

- **CN Railway installed recycled parts; Metrolinx paid for new.** Metrolinx informed us that it may sometimes visually inspect railways once they are built, but inspections are not mandatory, and the results of any inspections that are done are not documented. We noted one instance where recycled parts were being used when only new parts were purchased. Without inspecting the parts used in railway construction, Metrolinx cannot know if it pays for new parts but receives recycled parts instead.
- **Metrolinx pays CN and CP excessive mark-up rates on projects.** All contracts with CN and CP are sole-sourced. CN's mark-up rates on labour and parts are set in a long-term agreement with Metrolinx. These rates are as much as 74% higher than industry benchmarks. Metrolinx has not negotiated any mark-up rates with CP, and they are usually not transparent. We found that CP disclosed their mark-up rates in only one of the projects we sampled, and they were about 30% higher than industry benchmarks.

3.10 Ministry of Transportation—Road Infrastructure Construction Contract Awarding and Oversight

The Ministry of Transportation (Ministry) is responsible for the construction and maintenance of provincial highway and bridge infrastructure, which is currently valued at $82 billion. It consists of about 40,000 km of highway lanes covering a distance of about 17,000 km, and almost 5,000 bridges and culverts.

The Ministry enters into construction contracts for work either to rehabilitate existing infrastructure in order to continue using it or to create new infrastructure to expand capacity. The road network, most of which was originally built by the 1990s, requires considerable ongoing maintenance. The Ministry expects to spend about $14 billion over the next 10 years for road and bridge rehabilitation and about $4 billion for road and bridge expansion.

In the past five years, the Ministry has awarded about 600 large construction contracts (greater than $1 million each) totalling about $5.5 billion. These contracts are for projects such as re-paving sections of highways, expanding highways, building new bridges or rehabilitating existing bridges. The average contract was valued at $9.1 million. The Ministry also awarded about 1,450 minor construction contracts totalling about $580 million. Minor work usually involves less significant repairs on existing structures. The average value of these contracts was about $400,000.

The road construction industry in Ontario is mainly represented by two groups: the Ontario Road Builders' Association (ORBA) and the Ontario Hot Mix Producers Association (OHMPA). They consult with the Ministry on technical matters and lobby on behalf of their members' interests.

Our audit found that, in 2000, the Ministry began identifying significant problems throughout

the province with pavement cracking years before it is expected to, resulting in increased cost to taxpayers for highways having to be repaired or repaved sooner than expected, and increased inconvenience and time lost for drivers due to more frequent road work. In 2004, the Ministry confirmed that poor quality asphalt cement was the primary cause of premature cracking. In 2007, two tests for assessing the quality of asphalt and the likelihood of it cracking prematurely were developed; however, at the time of our audit, the Ministry had fully implemented only one of them—five years after it was developed—and was using the second on only a limited number of projects. This is the case because over the years, the Ministry decided not to implement all the tests due to multiple requests from the asphalt industry to not implement them.

Similarly, in response to requests from construction contractors who belong to ORBA, the Ministry made significant policy changes that benefit the contractors over taxpayers' best interests.

The Ministry has also paid bonuses to contractors after it became aware that contractors may have tampered with samples, substituting good samples for testing in place of the actual asphalt used. As well, the Ministry has paid for costs to repair roads that should have been covered under contractors' warranties. Although the Ministry works with contractors to change their behaviour through discussions and improvement plans, it rarely penalizes poorly performing contractors, including contractors that breach safety regulations, and allows them to continue to bid on and be awarded future contracts.

We also noted that it is the contractors, not the Ministry, that hire the professional engineers responsible for certifying that construction of structures (such as bridges) adheres to required standards. A few of these engineers have certified that construction, that was subsequently found to be unsafe, was in compliance with the standards.

Some specific observations in this audit include:

- **Premature cracks in highways have significantly increased Ministry's highway-repair costs.** We identified highway projects in all regions of the province where pavements had to be fixed for cracks much earlier than their expected life of 15 years—and some as early as only one year after the highway was open to the public. Sufficient documentation is not available for us to determine the full extent of this issue and the total additional cost paid by the Ministry to repair pavement because of premature cracking. However, we were able to examine five highway projects where all repair costs incurred because of premature cracking were tracked; we noted that the Ministry paid $23 million to repair these highways on top of the $143 million originally paid to pave them. The highways had to be repaired just one to three years after the pavement was laid.
- **Ministry delayed implementing tests to identify asphalt likely to crack prematurely.** The Ministry extensively studied two tests that would allow it to detect, before asphalt was laid, whether pavement is likely to crack early—both tests are required in combination to understand if pavement will in fact crack early. But rather than implementing these new tests as soon as they were validated in 2007, the Ministry waited five years to implement one of them—and still has not implemented the other one across all contracts nine years later. When we asked why action was not taken sooner, the Ministry informed us that instead of a traditional client/supplier relationship between the Ministry and its contractors and suppliers, its approach is to work "collaboratively" with the industry. Thus, decisions such as implementing these tests were discussed and determined through a Joint Pavement Committee made up of OHMPA and Ministry staff and, in essence, allowed the Ministry's suppliers to determine the quality of materials they would supply, even though premature cracking would result in additional revenue for the industry as a whole and incur additional costs for taxpayers.

- **Ministry pays contractors bonuses for meeting the requirements of the contract, something contractors are always expected to do.** In 2012, the Ministry paid contactors about $8.8 million in bonuses for providing the quality of asphalt specified in contracts. It has continued to pay roughly the same amount of bonuses since then (although in 2013 it stopped tracking the amounts paid). However:
  - The Ministry has been aware since 2000 of quality issues surrounding asphalt, and had neither addressed its concerns about premature cracking in a timely manner, nor changed its bonus-payment practices.
  - Contractors have the opportunity to tamper with asphalt samples to obtain bonuses. The Ministry was aware of sample-switching but has neither investigated it to impose fines nor implemented controls to ensure that sample-switching does not occur.
- **Ministry policies changed to benefit the Ontario Road Builders' Association (contractors' association).** Although it is rare throughout the provincial government for ministries' internal audit reports to be shared with outside parties (unless a request is made through the *Freedom of Information and Protection of Privacy Act*), the Ministry shared with ORBA an internal audit report of a review of its construction contracts program. ORBA requested to review the report's recommendations with the Ministry, so the Ministry established a joint policy committee of ORBA and Ministry representatives to review the report. Ministry staff had concerns with the establishment of this committee because it would allow ORBA to strongly influence how the report's recommendations should be implemented, which was an internal operational matter. The Ministry decided against staff's recommendations and created a joint policy committee comprised of six ORBA members (five of which are contractors) and six government representatives (only three from the Ministry of Transportation, with one other from the Ministry of Infrastructure, one from Infrastructure Ontario, and one from the Ministry of Finance). Moreover, the Ministry decided that rather than working on implementing recommendations made by Internal Audit, the joint policy committee would focus on addressing an action plan document created by ORBA and its recommendations. We noted that ORBA's action plan, not unexpectedly, was in the best interests of its members.

  Through this process, and because of multiple requests made by ORBA prior to it, ORBA influenced internal Ministry policy in its favour, including the following:
  - **A Ministry policy changed to allow contractors to delay paying fines; some fines are now uncollectible.** Prior to 2011, contractors had to pay liquidated damages (late fines) right away when they were late delivering on projects. However, the Ministry agreed to a change in its policy to allow contractors to delay paying fines if the contractor wanted to contest the fine. We noted that other provinces such as Alberta, British Columbia and Quebec collect fines immediately, then issue a refund if the dispute is resolved in the contractors' favour. With this change in policy, contractors have been able to postpone paying a total of about $6 million in fines for up to four years. During these four years, two contractors went bankrupt; the Ministry will never be able to collect the $660,000 in late fines they owed.
  - **New policy no longer discourages litigious contractors from repeatedly suing the Ministry.** Prior to 2015, the Ministry could prohibit contractors that filed multiple lawsuits that it deemed to be frivolous from bidding on future contracts. Lawsuits considerably add to the workload of Ministry staff and to legal costs for the

Ministry. Upon the industry's requests, the Ministry removed a contract clause in 2015 that had given the Ministry the ability to exclude litigious contractors from bidding on future contracts. Ministry records show that between 2007 and 2015, contractors filed 12 lawsuits. Prior to 2007, lawsuits were virtually non-existent. The new policy change may contribute to even more lawsuits.

- **The Ministry changed its dispute-resolution policy, providing incentive for contractors to dispute more often.** In the Ministry's original dispute-resolution process, a contractor wishing to make a claim against the Ministry had to escalate the claim through three levels within the Ministry before launching legal action. This process worked well given that about 95% of disputes were successfully resolved through this process. However, upon the industry's request, the Ministry agreed in 2016 to change the process, allowing contractors to ask for a third-party referee to be involved at any level of the dispute process. There is a risk that referees may make middle-ground decisions instead of strictly applying the terms of the contract. This may create an incentive for contractors to file more claims and go directly to a referee.
- **Engineers who certify structures are built correctly are hired by the contractor, and have provided false certifications.** One of the most important quality-control measures in building public infrastructure is to have sufficient oversight by a professional engineer to verify and provide certification that key construction activities are performed to the appropriate standards. Given the nature and importance of their work, the Quality Verification Engineers (QVEs) who perform this work should be independent from the contractors whose work they are reviewing—but, in fact, we found that they are hired by, work for and report directly to the contractors. We noted that Ministry regional staff had identified instances across the province where QVEs provided erroneous or misleading conformance reports to the Ministry. The Ministry also relies on its contract administrators and quality assurance staff to provide oversight, but a sign-off by the QVE provides assurance to the Ministry that a structure will be safe for public use and that specifications have been met.
- **The Ministry is lenient in managing poorly performing contractors.** The Ministry does not effectively penalize contractors that have serious performance issues, and allows them to bid on future contracts. Contractors that have received unsatisfactory ratings are allowed to continue to bid on and have been awarded significant amounts of work for the Ministry. For instance, three contractors that have consistently received an unsatisfactory rating for several years because of their poor performance were awarded construction contracts worth about $45 million each over the last five years—for a total of about $135 million. As well, the Ministry has paid to repair the contractors' substandard work even when the work was to be covered by the contractor's warranty.
- **The Ministry awards new projects to contractors that have breached safety regulations.** The Ministry can penalize contractors that perform unsafe work; in practice, this rarely happens. Rather than imposing monetary fines for unsafe work, the Ministry's penalty process is intended to reduce the amount of future work a contractor can bid on. However, we noted that in seven such infractions we examined, none of the penalties were large enough to prevent contractors from bidding on Ministry projects. This is because the ceiling amount (the maximum amount a contractor can bid on for a contract) is not reduced enough by the penalty to impact any future bids by the contractor. Also, a smaller

contractor that had breached safety regulations was banned from bidding on future contracts in one of the Ministry's regions but was still awarded work in other regions. In addition to these penalties, the Ministry also works with contractors to change their behaviour through discussions and improvement plans.

3.11 Physician Billing

As of March 31, 2016, Ontario had about 30,200 physicians (16,100 specialists and 14,100 family physicians) providing health services to more than 13 million residents at a cost for the year then ended of $11.59 billion. This is 20% higher than the $9.64 billion paid to physicians in 2009/10.

Physicians operate as independent service providers and are not government employees. They bill their services to the province under the Ontario Health Insurance Plan (OHIP) as established under the *Health Insurance Act*.

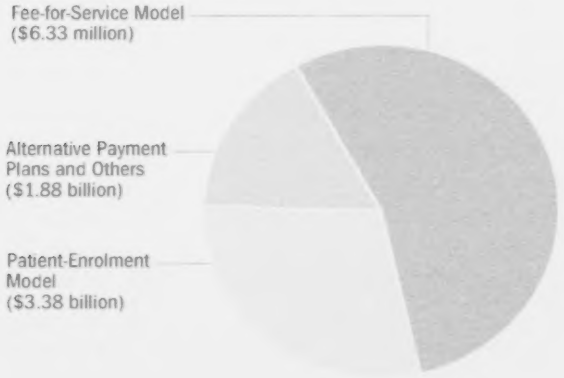
Under the December 2012 Ontario Medical Association Representation Rights and Joint Negotiation and Dispute Resolution Agreement (OMA Representation Rights Agreement), the Ministry of Health and Long-Term Care (Ministry) recognized the OMA as the exclusive bargaining agent of physicians, and both parties agreed, among other things, to consult and negotiate in good faith on physician compensation and related accountability.

The Ministry is responsible for establishing policies and payment models to fairly compensate physicians, while at the same time ensuring that taxpayer funds are spent effectively. Through various divisions with an annual budget of about $27.9 million and 260 staff, the Ministry administers payments to physicians and ensures billings are appropriate. Its Negotiations and Accountability Management Division has the main role in overseeing this billing process.

Physicians in Ontario can bill under three major models:

- The first is a **fee-for-service model** (fiscal year 2015/16—$6.33 billion) under which physicians are compensated based on a standard fee for each service they perform. They bill using fee codes in OHIP's Schedule of Benefits. This model has been the principal way that physicians bill since 1972. It is widely used today, mainly by specialists.
- The second is a **patient-enrolment model** (fiscal year 2015/16—$3.38 billion) under which physicians form group practices (such as Family Health Organizations and Family Health Groups) and are paid for the number of patients enrolled with them, and for a predetermined basket of services the group provides to those patients. The objective is for family physicians to offer their patients more comprehensive and continuous care. Remunerations might also include a combination of bonuses, incentives and other payments for additional work including fee-for-service payments for services outside the basket of services. Family physicians could opt into one of the patient-enrolment models or continue with fee-for-service. This type of model generally allows family physicians to earn more than under the fee-for-service model. As of March 31, 2016, 8,800 out of 14,100 family physicians had opted for one of the patient-enrolment models (Family Health Organizations and Family Health Groups accounted for 92% of the total number of enrolled patients). The remaining family physicians mainly bill fee-for-service or are paid through alternative payment plans.
- The third is **alternative payment plans** (fiscal year 2015/16—$1.88 billion) and other contracts with hospitals and physician groups to provide specific services. In addition to the $1.88 billion, approximately $1.2 billion was paid to alternative-payment-plan physicians as fee-for-service, which is included in the $6.33 billion paid under the fee-for-service model mentioned above. **Figure 1** provides a breakdown of payments.

Figure 1: Payments to Ontario Physicians, 2015/16
Source of data: Ministry of Health and Long-Term Care



Over the last five years, Ontario physicians have been among the highest paid in Canada. While one reason for this is that Ontario has the third-highest population-per-physician ratio, it also compensates more physicians than other provinces with models such as the patient-enrolment model—a more expensive model than fee-for-service. Over the years, physicians were paid additional incentives even after reviews concluded that some of these payments likely did not improve the quality of patient care. For example, in 2014/15, each family physician in patient-enrolment models received $3 per patient each month, which cost $364 million on top of base capitation payments (the fixed amount paid for each enrolled patient, regardless of patient visits or services actually performed).

However, use of patient-enrolment models has still not translated into increased access to care as measured by wait times—57% of Ontarians waited two days or more to see their family physician in 2015/16 as compared to 51% in 2006/07. Ministry survey data for the period October 2014 to September 2015 showed that approximately 52% of Ontarians found it difficult to obtain medical care in the evening, on a weekend or on a public holiday without going to a hospital emergency department.

Our review of Ministry data noted that in 2014/15, each physician in a group practice called a Family Health Organization worked an average of 3.4 days per week, while each physician in a group practice called a Family Health Group worked an average of four days per week. In 2014/15, 60% of Family Health Organizations and 36% of Family Health Groups did not work the number of weeknight or weekend hours required by the Ministry. As well, many patients are visiting walk-in clinics for care that could normally be provided by family physicians. The Ministry's survey data for October 2014 to September 2015 showed that approximately 30% of Ontarians had visited a walk-in-clinic in the last 12 months.

The Ministry is also having challenges managing and controlling the use of services billed under the fee-for-service model. One way to achieve some cost savings here is by encouraging physicians, based on clinical research, to reduce medically unnecessary services. However, the Ministry has had limited success with this and in 2015 implemented across-the-board cuts to physician payments, which is not a sustainable way to contain costs.

Another way to manage costs is to adjust fee-for-service rates based on new clinical practices—an area where Ministry attention is still needed. Further, the Ministry's oversight and recovery of inappropriate fee-for-service payments is weak and is hindered by its lack of an inspection function and ineffective enforcement of payment recovery mechanisms.

Some of our more detailed findings are as follows:

- **Patient-enrolment models for compensation of family physicians are not meeting original objectives and pose management issues for the Ministry.** There were four objectives when Ontario decided to implement the more expensive patient-enrolment model: to increase patient and physician satisfaction, cost-effectiveness, access to care, and quality and continuity of care.
  - The objective of increasing patient satisfaction with family physicians has been achieved, but at a cost: the Ministry estimates that for the year ended

March 31, 2015, physicians were paid for base capitation under Family Health Organizations approximately $522 million that would not have been paid under a fee-for-service model, in part because physicians were compensated for approximately 1.78 million patients that they had enrolled, but did not treat.

- Although the number of Ontarians who have a family physician has risen by 43% since 2006/07 (from 7.4 million to 10.6 million in 2015/16), it has not translated into increased access to care as measured by wait times, as previously noted.
- The Ministry is not able to demonstrate whether patient-enrolment models have improved quality and continuity of care, and its cost-effectiveness evaluations are inconclusive. The Ministry's billing system indicated that 40% of enrolled patients went to walk-in clinics or other family physicians outside the group in which they were enrolled. As well, an estimated 27% of enrolled patients have chronic health conditions and regularly seek primary care outside their physician group, contrary to best practices. This resulted in duplicate payments of $76.3 million cumulatively over the five years up to fiscal 2014/15. The Ministry does not recover these payments.
- High use is being made of emergency-department services for non-urgent care that could be provided by family physicians. During 2014/15, about 243,000 visits were made to emergency departments for conditions that could have been treated in a primary care setting. The Ministry estimated these visits cost $62 million, of which $33 million was incurred by patients enrolled in Family Health Organizations that are compensated using the patient-enrolment model. The Ministry does not recover this money from these patients' family physicians.
- In 2014/15, 1.78 million (or 33%) of the 5.4 million patients enrolled with a Family Health Organization did not visit their family physician at all, yet these physicians still received a total of $243 million for having them enrolled. Most of the patients who did not visit their physicians were males between the age of 20 and 29.

- **Ministry faces challenges controlling costs under the fee-for-service model.**
  - **Under the 2012 OMA Representation Rights Agreement, the Ministry and the OMA must consult and negotiate in good faith to establish physician compensation.** Fee-for-service claims have been growing at an annual rate of 3.3%, despite the Ministry's targeted rate of 1.25%. In a taxpayer-funded system, the decision to provide a service should be based on whether it is medically necessary—a professional judgment that should also be informed by medical research studies. The Ministry has not been successful in achieving a reduction of medically unnecessary services. It initiated an across-the-board payment reduction because it did not reach an agreement on future billing amounts and rules with physicians.
  - **Ministry does not have the information it needs to assess whether the large variances in gross fee-for-service payments to the same type of specialists are reasonable.** We noted that large variances exist in gross payment per physician (before deduction of office expenses and overhead) within certain specialties. For example, in 2014/15, ophthalmologists at the higher end of the pay range received an average of about $1.27 million each—close to 130%, or over $710,000, higher than the approximately $553,000 received by ophthalmologists in the middle of the pay range. However, the Ministry does not have complete information on physicians'

practices and profit margins to help it analyze the disparities.

- **There is a high disparity of gross payment per physician between specialists.** The fee-for-service model in Ontario favours procedural specialists (those who perform procedures such as diagnostic testing or surgery), who also generate a high volume of services. For example, vascular surgeons, who perform on average 12,230 services per year, would be paid an average of $43 per service, whereas pediatricians average 6,810 services and would be paid an average of $31 per service. To assess reasonableness, and the impact of technology on service levels, the Ministry needs to obtain more information on physicians' practices, including operating costs and profit margins.

- **Ministry lacks a cost-effective enforcement mechanism to recover inappropriate payments from physicians.** The Ministry has had no inspector function since 2005. Its current recovery process on inappropriate billings is lengthy and resource-intensive: the onus is on the Ministry to prove that the physicians who bill on the honour system are in the wrong, not on the physicians to prove they are entitled to the billing. Unless a physician repays amounts voluntarily, it is very difficult for the Ministry to recover inappropriate payments. Legislative changes in 2005 established a Physician Payment Review Board. Alberta and British Columbia can order a physician to repay overpayments without an order from a similar board.

- **Ministry does not investigate many anomalous physician billings.** The Ministry did not investigate many instances where physician billings exceed the standard number of working days and expected number of services. We noted that, for example, nine specialists each worked over 360 days in 2015/16; six of these worked 366 days (2016 was a leap year). A further example includes one respirologist who worked 361 days in 2015/16 and billed the province $1.3 million, close to five times higher than the upper expected limit and billed for close to 12,400 services that year, about four times the upper expected range for the same billing category. Other examples of anomalies:
  - One cardiologist worked 354 days in 2015/16 and billed the province $1.8 million, which is three times higher than the upper expected limit for physicians in the same billing category (procedural specialists). This specialist provided over 13,200 services that year, 2.4 times the upper range of expected services for physicians in the same billing category.
  - One diagnostic radiologist worked 313 days in 2015/16 and billed the province $1.7 million, which is 2.8 times the upper expected limit for physicians in the same billing category (diagnostic specialists). This specialist provided over 57,400 services that year, 5.6 times the upper range of expected services for physicians in the same billing category.

While the Ministry had initiated some investigations on its own, the investigations were not done in a timely manner. For example, one cardiologist billed $2.5 million during 2014/15 for performing over 68,000 services, more than six times the number of services rendered by the average cardiologist. However, the Ministry had not concluded its investigation at the time of our audit.

- **Ministry does not follow up on many cases of possible inappropriate billings by physicians.** Since the beginning of 2013, the Ministry has not actively pursued recovery of overpayments in proactive reviews; it was recovering approximately $19,700 in 2014 and nothing in 2013 and 2015. In prior years, recoveries were well over a million dollars. As well, the Ministry no longer follows up on all physicians who have billed inappropriately in

the past. This is a concern since in our analysis of 34 physicians who billed inappropriately, 21 had previous instances of inappropriate billing. In addition, the Ministry acknowledged that some specialists are systematically billing one particular code inappropriately. We identified about 370 specialists who were billing this code inappropriately and estimated that between April 1, 2012, and March 31, 2016, the overpayment amounted to approximately $2.44 million.

- **Ministry has had minimal success in controlling excessive preoperative cardiac testing.** The Ministry targeted savings of $43.7 million for 2013/14 by reducing the number of unnecessary preoperative cardiac tests, but actual savings were only $700,000. The Ministry later calculated that for fiscal year 2014/15 alone, approximately $35 million was paid to physicians for up to 1.15 million preoperative cardiac tests, which may not have been medically necessary, for low-risk surgeries.
- **Concerns of the Ontario Association of Cardiologists (Cardiologists Association) about cardiac-care spending published in an open letter to the Auditor General were reasonable.** The results of our review of the concerns are detailed in this report. In October 2014, the Ministry became aware of fee-for-service claims for two cardiac rhythm monitoring tests that were inappropriately claimed and paid to physicians. The Ministry determined that approximately 70 physicians were overpaid by at least $3.2 million between April 2012 and May 2015. However, at the time of our audit, the Ministry was not planning to recover any of this amount. In October 2015, the Ministry made the fee for cardiac-ultrasound services the same regardless of whether or not a cardiologist was physically on site. Prior to this, although a cardiologist could have supervised services via telephone or video-conference off site, a cardiologist physically present for the services would have been paid more by being on site. Our review of the Ministry's data for the period October 2015 to March 2016 in comparison to the same prior-year period found that the increase in amount paid by the Ministry and the volume of services conducted was minimal—less than 0.1%. However, we believe that the Ministry should continue to monitor the volume of these services provided to ensure that only necessary services are being conducted with proper supervision.
- **Taxpayers continue to pay significant amounts for the rising cost of physician medical liability protection.** A joint effort between the Ministry, the OMA and the Canadian Medical Protective Association to review the legal context surrounding the dramatic increase in medical malpractice trends is long overdue.

3.12 Specialty Psychiatric Hospital Services

There are about 2,760 long-term psychiatric beds in 35 facilities (primarily hospitals) across Ontario. These beds are for children, adults and seniors who need treatment for the most severe or complex forms of mental illness. The beds are also for forensic patients—people who have, or are suspected of having, mental illness and who have been charged with a criminal offence.

About half (1,389) of these beds are located in four hospitals, called specialty psychiatric hospitals, that primarily provide mental health care. Our audit focused on these four hospitals, which are:

- Centre for Addiction and Mental Health (CAMH) in Toronto;
- Ontario Shores Centre for Mental Health Sciences (Ontario Shores) in Whitby;
- The Royal Ottawa Health Group (The Royal) with sites in Ottawa and Brockville; and
- Waypoint Centre for Mental Health Care (Waypoint) in Penetanguishene.

In 2015/16, these four specialty psychiatric hospitals treated about 7,200 patients and handled about 280,000 visits from out-patients (people who can manage their mental illness without needing to stay overnight at a hospital).

A referral is generally required for a person to be admitted to a specialty psychiatric hospital. Most patients are referred by general hospitals, family doctors, psychiatrists, or mental health community organizations.

When patients are ready to be discharged from a specialty psychiatric hospital but are not able to return home, or do not have a home to return to, the hospitals must co-ordinate with other care providers, such as supportive housing and long-term-care homes, to ensure that the patient's care needs will continue to be met.

The Ministry of Health and Long-Term Care (Ministry) is responsible for providing overall direction, funding and leadership for mental health care in Ontario. The Ministry provides funding to 14 regional Local Health Integration Networks (LHINs) responsible for planning and integrating health services in their respective region. LHINs enter into an accountability agreement with specialty psychiatric hospitals and provide funding to them. In 2015/16, specialty psychiatric hospitals received $673 million, which represents over 20% of the $3.3 billion the Ministry spent in total on mental health care.

Our audit found that for the past five years, specialty psychiatric hospital funding did not keep up with inflation or the increased demand for mental health services. To deal with this, these hospitals have had to close beds, which has resulted in patients now waiting longer to access specialty psychiatric hospital services.

These hospitals have also changed their employee mix to include more part-time staff. It is not clear that current resources, including staffing, allow enough activities like group therapy, or therapy involving the use of facilities available at the hospitals (such as swimming pools) to occur. These are important to a patient's treatment and patients feel there are not enough of them.

Specialty psychiatric hospitals have not been able to deal with safety concerns to the degree that staff have requested. We also found that important patient file documentation, such as inclusion of patient risks in patient care plans or updates on the status of a patient's treatment, was missing from patient files.

The Ministry and LHINs have focused less on specialty psychiatric hospitals compared to other areas of health care, such as general hospitals. The Ministry has not created mental health standards to ensure that specialty psychiatric hospitals are consistent regarding which patients they admit, how they treat those patients and how those patients are discharged. While the Ministry collects wait time information and funds general hospitals based on the demand for their services, it does not do this for specialty psychiatric hospitals. Specialty psychiatric hospitals have to regularly complete and submit the same template of information that LHINs collect from general hospitals, however this template contains very little information that is specific to mental health care or specialty psychiatric hospitals. It asks many details that specialty psychiatric hospitals return blank because they are unrelated to them, such as the number of MRIs and breast screenings they perform to detect cancer. As a result, the Ministry and LHINs are not collecting the appropriate type of information to know how successful specialty psychiatric hospitals are in treating their patients.

The following are some of our significant observations:

- **Wait times for patients to receive treatment are long and getting longer:** In 2015/16, children had to wait more than three months to receive help for severe eating disorders at Ontario Shores. At Waypoint, the wait list for one of the main out-patient programs was so long that in 2015/16, the hospital temporarily stopped adding new people to the wait list, even though they required the treatment.

Patients with borderline personality disorders (instability in mood and behaviour) waited about a month and a half in 2011/12 for a program at Ontario Shores. In 2015/16, they had to wait seven months. Our audit of hospital records over the past five years found evidence of two people who died by suicide while waiting for help.

- **More people could have been treated if patients were not staying in the hospitals longer than necessary as a result of a shortage of beds in supportive housing and long-term-care homes:** In the last five years, approximately one in 10 beds in specialty psychiatric hospitals was occupied by patients who no longer needed to be treated in the hospital but could not be discharged due to the lack of available beds in supportive housing or at long-term-care homes. The cost of care there is less than one-fifth of what it is at specialty psychiatric hospitals. In 2015/16, if the four specialty psychiatric hospitals had been able to find a place to discharge their patients as soon as required, the cost of caring for these people in supportive housing or long-term-care homes would have been $45 million less, and the hospitals would have been able to treat about 1,400 more people.
- **There is a lack of long-term psychiatric beds in some regions:** In 1988, the Ministry commissioned a report that recommended the Ministry ensure all residents have access to mental health services in their own communities or as close to them as possible. Almost 30 years later that is still not the case. In the North Simcoe Muskoka LHIN, there are no beds for children with mental illnesses. Beds dedicated for individuals with addictions are only available in six of the 14 LHINs. The lack of needed care resulted in the Ministry spending almost $10 million between 2011/12 and 2015/16 to send 127 youths to the United States so that they could receive needed treatment.
- **Long-term psychiatric beds have closed across the province:** Between 2011/12 and 2015/16, there was a net reduction of 134 long-term psychiatric beds across the province. Thirty-two of those long-term beds that were closed were at specialty psychiatric hospitals. Bed reductions stemmed from the limited increase in funding specialty psychiatric hospitals got for their ongoing operations.
- **The Ministry and LHINs are not collecting relevant information for funding decisions:** During our audit, the Ministry increased funding for specialty psychiatric hospitals by 2%. This increase was not supported by actual demand for specialty psychiatric services; nor did it target programs that had the biggest need (wait lists) for treatment. Without mental health targets and relevant information, the Ministry or LHINs cannot make effective funding decisions.
- **Some patient files are being completed late and are missing required information, which could impact the patient's care:** Patient files we reviewed at CAMH and Ontario Shores were updated late or missing important information. During a patient's admission, key patient health and behavioural risks are identified. These risks should be documented in a patient's care plan. Some care plans we reviewed were missing this information. About 40% of the care plans were prepared late and were missing timelines for patients' treatment goals. We also found that hospital discharge plans were completed later than they should have been, which could increase wait times for beds.
- **The hospitals are increasing their use of part-time staff:** Over the past five years hospitals shifted toward hiring more part-time staff. The Registered Nurses Association of Ontario (RNAO) recommends that 70% of all nursing staff should be full-time to achieve best quality care results. In 2011/12, three specialty psychiatric hospitals employed at

least 70% of their staff who provide direct patient care on a full-time basis. Five years later, one of the hospitals had a full-time staff level above 70% and all had fewer full-time staff overall. The mix of full-time and part-time staff varies between the hospitals, and none have a target for this mix.

- **The hospitals are spending less money on direct patient care than other comparator hospitals and their spending has decreased:** Since 2011/12 specialty psychiatric hospitals' spending on direct patient care has decreased by 2 cents, from 64 cents to 62 cents in 2015/16, out of every dollar that they receive from the Ministry. This is 5% less (3 cents) than the average of 65 cents that other comparator hospitals in Ontario spend on direct patient care. During this time period, specialty psychiatric hospitals had to deal with increasing costs without much additional funding from the Ministry for their ongoing operations.
- **There are not enough mental health emergency departments in the province:** CAMH has the only emergency department in Ontario that is exclusively for people experiencing mental health issues. This emergency department was first established in the 1960s. Although Ontario's population has doubled since then, no additional mental health emergency departments currently exist in the province. The Ministry has no plans to create additional ones.
- **Waypoint's new forensic building has had deficiencies since it opened in 2014 that have seriously impacted the safety of patients and staff:** In 2014, Waypoint opened a new building to house its high-security forensic program. Since then, 90 deficiencies impacting staff and patient safety were identified. These deficiencies, including a poorly constructed fence and a broken electronic door-closing mechanism, contributed to over 800 reported safety hazards between 2014/15 and 2015/16 (related to staff assaults, property damage, vandalism and a patient climbing over a fence to leave without authorization). As a result of several hospital staff being assaulted and injured, including one who was stabbed by a patient, the Ministry of Labour was called in and issued seven compliance orders to address safety issues that occurred in the new building.
- **Without provincial mental health standards, the hospitals have each created their own standards for admission, treatment and discharge, resulting in patients being treated differently:** Ontario does not have provincial mental health standards and currently there is no set timetable to create them. In Ontario, each of the four specialty psychiatric hospitals develops their own standards pertaining to patient admission, treatment and discharge. These standards can sometimes differ resulting in differences of how patients with the same diagnosis are regarded by each hospital. One general hospital reported to us that it referred the same patient to two of the specialty psychiatric hospitals, and the patient met admission standards at one hospital, but was rejected at the other.
- **Specialty psychiatric hospitals have developed new treatment methods that show improved patient care outcomes:** Specialty psychiatric hospitals are implementing new treatment methods to better treat certain mental illnesses. For instance, Ontario Shores developed a new approach to treat certain schizophrenia patients that led to a decrease in the number of patients who were prescribed multiple anti-psychotic medications. Such medications have strong side effects. However, we found that there is no process for hospitals to share new treatment methods developed by their peers.
- **The Ministry has not done any analysis to learn why general hospital emergency room visits in Ontario related to mental health are increasing:** In the past five years,

there has been a 21% increase in general hospital emergency department visits by people with mental illness. During that time, the percentage of repeat emergency visits within 30 days for substance abuse grew by 18% and for mental health by 9%. The Ministry has not conducted any analysis to determine why emergency department visits for mental health or substance abuse have increased.

- **Mental health information is not shared among the LHINs or with the police:** Only one LHIN has a database whereby all providers of mental health services can look up patients' information to identify all the care and services that patients are receiving. This ensures patients receive the care that they require and prevents duplication of care. A similar problem exists with the sharing of patients' information with the police. Police told us that some hospitals are not willing to share patient information. Without this information, the police have to assume patients who leave without authorization from specialty psychiatric hospitals pose a high risk of danger to the public, which can lead to a greater use of force.

3.13 Supply Chain Ontario and Procurement Practices

The process of procuring goods and services by the Government of Ontario is intended to be open, fair and transparent. The Government spends an average of $3.5 billion annually on procuring goods and services. (This does not include spending on the construction of capital assets, such as highways and buildings.)

The individual government ministries across the Province independently make decisions on what goods and services they require. The Treasury Board Secretariat (Secretariat) is responsible for updating and maintaining the rules and best practices for procurements that are laid out in the Ontario Public Service Procurement Directive (Directive). The ministries are required to follow these procurement requirements.

According to these requirements, ministries must first source goods and services from arrangements of preferred suppliers. These suppliers have been selected through a competitive process by Supply Chain Ontario (SCO) to ensure that the ministries are receiving the best price for quality goods and services. The ministries select preferred suppliers to bid on their procurement contracts, and the winning supplier(s) provides the goods, services or consultants. For some goods and services, such as office supplies and courier services, SCO selects a single preferred supplier for all the ministries to use in order to get the lowest price through bulk purchasing.

The largest preferred supplier arrangement is IT Consulting Services. This service allocates, based on need, either internal IT staff or external IT consultants to ministries. It is managed by the Secretariat. The ministries make a request to the Secretariat for their IT staffing, which the Secretariat first tries to fill with internal employees. If none are available, it will help ministries find external IT consultants with the required expertise.

Overall, we found that ministries are following the procurement requirements and that procurement of goods and services is mostly competitive, fair and cost-effective. For example, based on our testing we found that most ministries properly planned and acquired their procurements competitively. In addition, ministries mostly received goods and services at the contract price. However, we did find examples where the procurement requirements were not followed. Non-compliance can increase ministries' risk of not receiving value for money from awarded contracts. We also noted that the government is not taking full advantage of bulk buying opportunities and may be forgoing associated price discounts. In addition, we noted that a shortage of internal IT staff is resulting in an overreliance on more costly external IT consultants. We further noted some weaknesses in how

ministries procure IT consultants that leave the process vulnerable to fraud.

Some of our specific findings are as follows:

- **Supply Chain Ontario (SCO) manages preferred supplier arrangements effectively.** We found that preferred supplier arrangement files were complete, awards were justifiable and the process was fair and done competitively according to the procurement requirements.
- **SCO lacks information to identify bulk buying opportunities.** SCO does not have ready access to ministries' procurement information because there is no centralized electronic database. For example, it can tell whether a supplier received a payment of $500,000, but does not know if the payment is for one contract or 10 contracts, the duration of the contract, or what good or service was purchased. Without this information, SCO cannot proactively identify new bulk buying opportunities that could potentially reduce future costs.
- **A shortage of internal IT staff has led to an overreliance on costly consultants.** Over the past two years, the ministries' approximately 3,200 requests for IT staff have been filled about 90% of the time by external consultants. The Secretariat, which oversees IT staffing, estimates that a consultant costs $40,000 more annually than a permanent employee. Part of the extra costs of using consultants is the middleman fee paid by the ministries to the preferred supplier for placing a consultant.
- **Best practices over the procurement of IT consultants are not always followed.** We found weaknesses in how ministries procure IT consultants. Consultants are hired without in-person interviews, payments to consultants can be authorized by the same person who hires them, and the Secretariat that processes these payments does not perform any additional review to ensure payments are legitimate. Because of these control weaknesses, the risk exists that the ministries may not always be selecting the most qualified candidate. For example, a senior manager at a ministry created and hired a phantom consultant. Over a period of several months, the senior manager approved the phantom consultant's invoices and pocketed $150,000 for himself. The Secretariat has still not implemented internal controls to prevent this situation from recurring.
- **The new online procurement system is not widely used due to design concerns.** In 2014, SCO implemented a new online procurement system intended to make the bid process more efficient and paperless. It was designed to conduct tenders online. However, concerns with the system, such as limiting the number of characters in data fields where suppliers input their bids, impact the bidding process. As a result, suppliers continue to submit paper bids that are assessed manually. In 2015/16 only about 146, or 32%, of 458 total tenders were conducted using the system. About 100 of the 146 were for complex tenders. Bids for another 145 complex tenders were still handled in paper form and reviewed manually. SCO intends to make use of the system mandatory by January 2017.
- **Suppliers are charged higher fees under the new online procurement system.** New system user fees charged to suppliers are two-and-a-half times higher than those charged before the new system was implemented. The increase in fees has raised the concern that small businesses could be discouraged from bidding on government contracts.

Chapter 2

Public Accounts of the Province

1.0 Summary

The Consolidated Financial Statements for the Province of Ontario present fairly the Province's annual deficit, net debt and accumulated deficit for the year ended March 31, 2016—but not for the prior fiscal year. Consequently, we issued a qualified audit opinion.

This issue stems from the correction of an error in the Province's accounting for pension assets of pension plans where the government is a joint sponsor. To the government's credit, it made the difficult and appropriate decision to properly adjust the statements for 2015/16. However, the prior year's comparative figures in the Province's consolidated financial statements were not adjusted.

Restating the prior year comparative figures is necessary to conform to standards of the Canadian Public Sector Accounting Board (PSAB) and, just as significantly, better convey to users of the statements that the impact on prior years' figures needs to be considered when looking at past financial trends.

We were puzzled by the approach taken by Treasury Board Secretariat and the Ministry of Finance in discussions with us during the audit regarding the accounting error. The government properly made the adjustment in the current year despite publicly disagreeing with the accounting treatment presented in its own financial statements. It also disclosed in a note to the financial statements that this reflected the Auditor General's interpretation of PSAB standards.

The government had sought external accounting and legal advice in August and September, but was still unable to provide us with an adequate position paper supporting its view that pension assets should continue to remain as an offset to pension liabilities on the Province's consolidated financial statements.

The accounting issue stems from the fact that the Province does not have unilateral access to and control of the pension plan assets. There is no agreement with the joint sponsor to provide this. Basically, unrestricted access to assets of any kind, whether they are pension assets or not, is required under generally accepted accounting principles in order to have an asset recorded in the financial statements.

The ultimate responsibility for the decision on the application of PSAB standards for the specific transaction described above rests with management—in this case, Treasury Board Secretariat and the Ministry of Finance acting for the Government—as preparers of the financial statements, who should consult with the Auditor General of Ontario as the financial statement auditors for the Province. As the auditor, we provide an opinion on the statements prepared by management. Thus, accounting decisions rest with management but the opinion decision rests with the Auditor General.

Equally unusual was that the government chose to enact an unnecessary regulation that only partially complied with PSAB standards, presumably to avoid a qualification by the Auditor General on the 2015/16 annual results.

In the past, we cautioned that the government had passed legislation to allow it to legislate accounting treatments through regulations whenever it wanted, rather than follow PSAB standards. We continue to caution that the use of legislated accounting treatments by the government on future transactions, or the introduction of further legislated accounting treatments, could increase the risk that the future financial results of the province may not be fairly stated.

It is our view that Canadian generally accepted accounting standards (i.e. PSAB standards) are the most appropriate for the Province to use in preparing the consolidated financial statements because they ensure that information provided by the government about the surplus and the deficit is fair, consistent and comparable to data from previous years and from peer governments. This allows all legislators and the public to better assess government management of the public purse.

Additional Issues

Increasing Audit Risk—The actions taken by the Government in releasing the consolidated financial statements late and without the audit opinion of the Auditor General, while also publicly disagreeing with an accounting issue before providing the Auditor General with information needed for her to issue an audit opinion, could be perceived by some as an attempt to undermine the role of the Office of the Auditor General. We note that materials were likely already printed, and a plan was likely already in place to publicly release the consolidated financial statements without the Auditor General's opinion, when we met with the Ministers of Treasury Board and Finance, their Chiefs of Staff and their Deputy Ministers on the morning of October 3, 2016, to further discuss the pension asset accounting issue. Yet nothing was mentioned at the meeting about the planned release later that day. Under Canadian Auditing Standards, the actions taken by government and the preparers of the consolidated financial statements toward financial reporting require us to reassess audit risk. Going forward, our Office will need to approach the audit of the consolidated financial statements with increased professional skepticism and will assess the need for expanded audit procedures.

Increasing Debt Burden—The Province's growing debt burden remains a concern this year, as it has been since we first raised the issue in 2011. This year, as in the past, we focus on the critical implications of the growing debt for the Province's finances.

Consistent with our commentary last year, we take the view that the government should provide legislators and the public with long-term targets for addressing Ontario's current and projected debt, and we again recommend that the government develop a long-term debt-reduction plan.

Use of U.S. Generally Accepted Accounting Principles (U.S. GAAP) Financial Results in Ontario's Financial Statements—We are carefully watching the financial impact on the Province's consolidated financial statements of the government's decision to consolidate Ontario Power Generation (OPG) and Hydro One's financial results based on U.S. GAAP instead of consolidating their financial results based on International Financial Reporting Standards (IFRS), which require the use of PSAB standards. We believe that the differences between the two standards could lead to material accounting differences, potentially as early as the 2016/17 fiscal year.

Increasing Public Communications on the Trillium Trust and the Greenhouse Gas Reduction Account—The Trillium Trust was established in 2014, under the *Trillium Trust Act, 2014* as an account within the consolidated revenue fund that will be used by the government to track transit and transportation expenditures against an allocation of funds from the sale of provincial assets. The

new *Climate Change Mitigation and Low-Carbon Economy Act, 2016*, will take effect in January 2017, creating new Greenhouse Gas Accounts that will begin tracking revenues from the Province's cap-and-trade system. Because there will be increased public communications on the use of these accounts, we will, in the coming year, audit compliance with the *Trillium Trust Act* and the *Climate Change Mitigation and Low-Carbon Economy Act, 2016*, with respect to transactions through these two consolidated revenue fund accounts.

Pension Note Disclosure Needs Improvement and Pension Assumptions Could be Re-Assessed—Based on additional research we conducted this year, we have recommended that the Province expand the pension plan disclosures in its consolidated financial statements and revisit the reasonableness of its pension assumptions.

This chapter contains 10 recommendations, consisting of 15 actions, to address our findings.

2.0 Background

Ontario's Public Accounts for the fiscal year ending March 31, 2016, were prepared under the direction of the Minister of Finance, as required by the *Financial Administration Act* (Act), and the President of the Treasury Board. The Public Accounts consist of the Province's Annual Report, including the Province's consolidated financial statements, and three supplementary volumes of additional financial information.

The government is responsible for preparing the consolidated financial statements for the Province of Ontario and ensuring that this information, including many amounts based on estimates and judgment, is presented fairly. The government is also responsible for ensuring that an effective system of internal controls, with supporting procedures, is in place to authorize transactions, safeguard assets and maintain proper records.

Our Office audits these consolidated financial statements. The objective of our audit is to provide reasonable assurance that the statements are free of material misstatements—that is, free of significant errors or omissions. The consolidated financial statements, along with the Auditor General's Independent Auditor's Report, are included in the Province's Annual Report.

The Province's 2015/16 Annual Report also contains a Financial Statement Discussion and Analysis section that provides additional information regarding the Province's financial condition and fiscal results for the year ended March 31, 2016. Providing such information is intended to enhance the fiscal accountability of the government to both the Legislative Assembly and the public.

The three supplementary volumes of the Public Accounts consist of the following:

- **Volume 1**—unaudited statements from all ministries and a number of schedules providing details of the Province's revenue and expenses, its debts and other liabilities, its loans and investments, and other financial information;
- **Volume 2**—audited financial statements of significant provincial corporations, boards and commissions whose activities are included in the Province's consolidated financial statements, as well as other miscellaneous audited financial statements; and
- **Volume 3**—detailed unaudited schedules of ministry payments to vendors and transfer-payment recipients.

Our Office reviews the information in the Province's Annual Report, and in Volumes 1 and 2 of the Public Accounts, for consistency with the information presented in the Province's consolidated financial statements.

The Act requires that, except in extraordinary circumstances, the government deliver its Annual Report to the Lieutenant Governor in Council within 180 days of the end of the fiscal year. The cut-off date for this year was September 27, 2016. The three supplementary volumes must be submitted to the

Lieutenant Governor in Council within 240 days of the end of the fiscal year. Upon receiving these documents, the Lieutenant Governor in Council must lay them before the Legislative Assembly or, if the Assembly is not in session, make the information public and then lay it before the Assembly within 10 days of the time it resumes sitting.

This year, the government delayed its tabling of its Annual Report and, on October 3, 2016, the government took the unprecedented and unnecessary step of releasing the Province's Annual Report and Consolidated Financial Statements without the Auditor General's opinion. In our view, this delay was not the result of an extraordinary circumstance—the Province fully controlled the release date of the financial statements and delayed making a decision on its accounting for pension assets.

We were disappointed with the government's decision to do this. In our view, it is not good public policy for the government to release unaudited consolidated financial statements because the members of the Legislative Assembly and public have no way of knowing whether the amounts presented in the Province's consolidated financial statements are presented fairly.

The Auditor General finalized her audit opinion on the March 31, 2016, consolidated financial statements once the government made its decision on the accounting for pension assets in its financial statements known to our Office by publicly releasing its unaudited consolidated financial statements. When the government released these unaudited financial statements, the Auditor General subsequently forwarded her Independent Auditor's Report to the government on October 5, 2016. The next day, the government submitted the province's 2015/16 Annual Report and Consolidated Financial Statements, along with the Auditor General's Independent Auditor's Report, and the three Public Accounts supplementary volumes to the Lieutenant Governor in Council. The Auditor General's audit opinion on the statements was qualified because the 2014/15 comparative figures were not restated to address an error in the accounting treatment of certain public-sector pension assets, and the Financial Statement Discussion and Analysis accompanying the audited financial statements did not reflect this restatement either. A qualified opinion is a serious matter.

This is discussed in more detail in **Section 3.0**—the province's 2015/16 Consolidated Financial Statements.

3.0 The Province's 2015/16 Consolidated Financial Statements

3.1 Auditor's Responsibilities

As the independent auditor of the Province's consolidated financial statements, the Auditor General's objective is to express an opinion on whether the financial statements are free of material misstatements and are prepared in accordance with standards of the Canadian Public Sector Accounting Board (PSAB) so that they give a true and fair view under PSAB standards. It is this independence, combined with the obligation to comply with the established Canadian Auditing Standards (CAS) and relevant ethical requirements, which allows the Auditor to issue an opinion that provides users with a greater degree of confidence in the financial statements.

To enable the Auditor General to form this opinion, our Office collects sufficient appropriate audit evidence and evaluates it to determine whether the financial statements are free of material misstatements. This includes assessing the government's preferred accounting treatment over certain transactions and analyzing its appropriateness under PSAB standards.

An assessment of what is material (significant) and immaterial (insignificant) is based primarily on our professional judgment. In making this assessment, we seek to answer the following question: "Is this error, misstatement or omission significant enough that it could affect decisions made by

users of the Province's consolidated financial statements?" If the answer is yes, then we consider the error, misstatement or omission as material.

To help us make this assessment, we determine a materiality threshold. This year, as in past years, and consistent with most other auditors in provincial jurisdictions, we set our threshold at 0.5% of the greater of government expenses or revenue for the year.

Our audit is conducted on the premise that management has acknowledged certain responsibilities that are essential to the conduct of the audit in accordance with Canadian Auditing Standards. These responsibilities are discussed next.

3.2 Management's Responsibilities

The auditor's report distinguishes the responsibilities between management and the auditor. Management is responsible for the preparation of the financial statements and the auditor examines the financial statements in order to express an opinion. The division of responsibility between the two roles is fundamental and preserves the auditor's independence, a cornerstone of the auditor's report.

In addition to the preparation of the financial statements and the relevant internal controls, management is also required to provide the auditor with all information relevant to the preparation of the financial statements, additional information that the auditor may request, and unrestricted access to those within the entity if the auditor determines it is necessary to obtain audit evidence. The Canadian Auditing Standards are clear on these requirements, and the fulfilment of these is communicated to the auditor in the form of a signed management representation letter at the end of the audit.

When an accounting transaction occurs, it is management's responsibility to be proficient in identifying the applicable standard(s), the implications on the transactions, decide on an accounting policy and ensuring that the financial statements present the transaction in accordance with the applicable financial reporting framework. The auditor must also be proficient in the applicable financial reporting framework in order to form an independent opinion on the financial statements and may perform similar procedures in identifying the applicable standard(s) and understanding the implications on the accounting transaction, but does not decide on the accounting policy or the accounting entries for the organization. These decisions are in the hands of management—in this case, Treasury Board Secretariat and the Ministry of Finance, both with support from the Office of the Provincial Controller Division.

When there are disagreements with the application or adequacy of accounting policies, the auditor assesses the materiality or significance of the matter in forming the audit opinion. If the issue is material, it would result in a qualified opinion in which the auditor concludes that the financial statements are fairly presented except for the items disclosed in the basis for the qualification. Again, this distinguishes the role of management and auditor such that the auditor examines the financial statements to express an opinion whereas management prepares the financial statements.

The Office of the Auditor General may make suggestions about the financial statements but this does not change management's responsibility for the financial statements. Similarly, the government may seek external advice on accounting treatments of certain transactions. In such situations, the government still has the ultimate responsibility for the decisions made, and the use of external advisers does not diminish or change the government's accountability as the preparer of its consolidated financial statements.

3.3 The 2015/16 Audit Opinion

The *Auditor General Act* requires that we report annually on the results of our examination of the Province's consolidated financial statements. The Independent Auditor's Report to the Legislative Assembly on the Province's Consolidated Financial Statements for the year ended on March 31, 2016 reads as shown on the following pages:

Office of the Auditor General of Ontario
Bureau du vérificateur général de l'Ontario

Independent Auditor's Report

To the Legislative Assembly of the Province of Ontario

I have audited the accompanying consolidated financial statements of the Province of Ontario, which comprise the consolidated statement of financial position as at March 31, 2016, and the consolidated statements of operations, change in net debt, change in accumulated deficit and cash flow for the year then ended, and a summary of significant accounting policies and other explanatory information.

Management's Responsibility for the Consolidated Financial Statements

The Government of Ontario (Government) is responsible for the preparation and fair presentation of these consolidated financial statements in accordance with Canadian public sector accounting standards, and for such internal control as the Government determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

My responsibility is to express an opinion on these consolidated financial statements based on my audit. I conducted my audit in accordance with Canadian generally accepted auditing standards. Those standards require that I comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the consolidated financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by the Government, as well as evaluating the overall presentation of the consolidated financial statements.

I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my qualified audit opinion.

.../2

Basis for Qualified Opinion

As at April 1, 2015, the Province increased the opening accumulated deficit by $9.154 billion to correct for an error in prior periods in its valuation allowance for an accrued benefit pension asset included in the liability for pensions and other employee future benefits. As reflected in the consolidated financial statements and described in Note 18, the Province has not restated its 2015 comparative period to reflect the correction of the error which constitutes a departure from Public Sector Accounting Standards. Accordingly, in the comparative period, opening accumulated deficit would have increased by $8.201 billion, education expense would have increased by $956 million, general government and other expense would have decreased by $3 million, annual deficit would have increased by $953 million and ending accumulated deficit would have increased by $9.154 billion.

Qualified Opinion

In my opinion, except for the effects of the matter described in the Basis for Qualified Opinion paragraph, the consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Province of Ontario as at March 31, 2016, and the consolidated results of its operations, change in its net debt, change in its accumulated deficit and its cash flows for the year then ended in accordance with Canadian public sector accounting standards.

Other Matter

I draw attention to the Province's Financial Statement Discussion and Analysis that has also not been restated for the effects on the comparative periods of the error in the valuation allowance for an accrued benefit pension asset included in the liability for pensions and other employee future benefits, as discussed in the Basis for Qualified Opinion paragraph above.

Toronto, Ontario
October 5, 2016

Bonnie Lysyk, MBA, CPA, CA, LPA
Auditor General

This year, our audit opinion on the Province's consolidated financial statements is qualified. This means that based on our audit work, we have concluded that the Province's consolidated financial statements for 2015/16 are fairly presented, except for the item disclosed in the basis-for-qualified-opinion paragraph.

The Auditor General's qualification this year arises from an error in the Province's accounting related to the Ontario Teachers' Pension Plan and the Ontario Public Sector Employees' Union Pension Plan presented in the comparative results for 2014/15. The significant rise in the value of the pension assets reported in the consolidated financial statements in recent years triggered an in-depth review by our Office.

We encountered considerable challenges this year in our audit work on the pension assets. Our Office worked diligently with the Office of the Provincial Controller (OPCD), Treasury Board Secretariat and Ministry of Finance to secure their written position paper of their opinion on the proper accounting treatment. To date, their complete analysis on the recognition and valuation of pension assets has not been provided to us, even after OPCD sought and received external advice. Throughout the audit, we received relevant pension information gradually and on a piecemeal basis from OPCD. It was difficult for us to appropriately assess the government's accounting position with new and not always applicable information being presented to us. At the end of the audit, in our view, OPCD was unable to adequately support their position that no adjustment to record a valuation allowance against the pension assets was actually needed.

However, although the government correctly adjusted the March 31, 2016, pension liability and pension expense for the current year ended March 31, 2016, the 2014/15 comparative figures were not restated to correct for the related prior period adjustment. A discussion of the accounting treatment of a pension asset is provided in **Section 3.9**. We determined that the pension asset adjustment impact on the comparative year in the financial statements was material and this is the basis for the Auditor General's qualified opinion.

The Auditor General has also included an "other matter" paragraph in the Independent Auditor's Report this year to point out that, in addition to making it difficult to compare 2015/16 to 2014/15, the error may also have an impact on interpretation of trends in previous years that are reflected in the Province's financial statement discussion and analysis.

3.4 Pension Assets and the Consolidated Financial Statements

At issue this year was the Province's accounting treatment of pension assets related to the jointly-sponsored Ontario Teachers' Pension Plan (OTPP) and the Ontario Public Service Employees' Union (OPSEU) Pension Plan. As at March 31, 2016, the government recorded pension assets from OTPP and OPSEU of $10.147 billion and $521 million, respectively, for a total of $10.668 billion.

On the consolidated statement of financial position, the pension asset is grouped in the pensions and other employee future benefits liability line item. The total pension assets in OTTP and OPSEU of $10.668 billion, is offset by $1.356 billion of accrued liabilities from other pension plans, which results in a net accrued pension asset of $9.312 billion before considering any valuation allowance. The $9.312 billion pension asset is further offset by other employee future benefits liabilities of $10.751 billion (all figures before valuation allowance). After applying the valuation allowance of $10.668 billion, this results in total pensions and other employee future benefits liability of $12.107 billion reported on the consolidated statement of financial position, as illustrated in **Figure 1**.

Before a pension asset is recognized, the Province, as a sponsor, must first consider the limit on the carrying amount of an accrued pension asset. The accrued pension asset cannot exceed the expected future benefit the Province can realize

Figure 1: Pension and Other Employee Future Benefits Liability (Asset) as at March 31, 2016
Sources of data: 2015/16 Consolidated Financial Statements

	2016 Pensions ($ million)	2016 Other Employee Future Benefits ($ million)	2016 Total ($ million)	2015 Total ($ million)
Obligation for benefits	117,542	10,999	128,541	124,726
Less: plan fund assets	(141,749)	(562)	(142,311)	(129,880)
Unamortized actuarial gains	12,649	305	12,954	6,084
Adjustments[1]	2,246	9	2,255	2,221
Accrued liability (asset)[2]	**(9,312)**	**10,751**	**1,439**	**3,151**
Valuation Allowance[2]	10,668	–	10,668	–
Total	**1,356**	**10,751**	**12,107**	**3,151**

1. Adjustments for pensions consists of:
   i) differences for amounts reported by the pension plans at December 31, instead of the province's year-end of March 31;
   ii) unamortized difference between employer and employee contributions for jointly sponsored pension plans; and
   iii) amounts payable by the province that are reflected as contributions in the pension plan assets.
2. Valuation allowances are related to the pension assets for the Ontario Teachers' Pension Plan and for the OPSEU Pension Plan.

from the asset. PSAB standards provide guidance on this and require an annual calculation of the "pension asset ceiling" as a test to determine if the pension asset is impaired (this is explained further in **Chapter 4, Section 4.01**, where we discuss sponsor accounting for a pension asset).

We contacted OPCD with concerns regarding the pension asset issue on June 8, 2016 and formally raised the pension asset accounting issue in our finalized Audit Planning Report to Treasury Board Secretariat and the Ministry of Finance dated June 24, 2016. It became apparent to us that management, as preparers of the financial statements, did not have documentation available to support their original decisions on the accounting treatment to support recognition of $10.668 billion of pension assets. A partial response was provided to us in late August, and this was the beginning of numerous meetings with OPCD, Treasury Board Secretariat, Ministry of Finance and their external advisers into September on the issue.

We co-operated with all parties to address the accounting treatment of the pension assets. However, we were provided at times with partial answers that did not fully address our questions and requests, thus prolonging the issue. In addition, the Province engaged external advisers to assist in this matter and, in our view, the advice received did not support the province's recognition of the $10.668 billion pension asset. Based on the information that we had received and our consultation with our own external experts, we issued letters in September 2016 to reconfirm our key concerns and outlined our position on the accounting treatment of the pension assets in an effort to encourage constructive dialogue and to receive an OPCD documented position on this accounting issue.

It was clear, based on the evidence provided and reviewed, that we would issue a qualified audit opinion if an adjustment was not made to recognize a full valuation allowance against the pension assets to reflect that the government cannot presently realize any benefit, i.e., essentially recognizing that the value of the pension asset is reduced to zero.

3.5 Legislated Accounting for Pension Assets

On September 30, 2016, the government amended the Ontario Regulation 395/11 for the current year's accounting treatment of the pension assets to mandate that a full valuation allowance be taken

against the recorded pension assets. This resulted in the pension assets value to the government as at March 31, 2016, being reduced to zero.

Historically, we have reported that it is a troubling precedent for a government to adopt accounting practices through legislation rather than following standards issued by the independent standard setters—the PSAB. Our position remains the same. Complying with generally accepted accounting standards does not require a regulation, and the move to legislate this accounting treatment for the pension assets was unnecessary.

However, the government had conveyed to us that senior management in the Ministry of Finance and Treasury Board Secretariat needed legislation in order to sign the management representation letter. A signed management representation letter is a requirement under Canadian Auditing Standards to indicate the fulfilment of management's responsibilities in an audit. These include and are not limited to ensuring that the financial statements have been prepared in accordance with PSAB standards for provincial government purposes.

Prior to passing the regulation, on September 29, 2016, the government provided us with an updated version of the financial statements with the pension asset adjustment as shown in the now tabled audited consolidated financial statements. A read of the notes to the consolidated financial statements reveals the purpose of the legislation. In Note 18, the government disclosed that the change in accounting was made to reflect our Office's view of PSAB standards as it relates to accounting treatment of the net pension assets.

To be clear, it is the government's responsibility to prepare the financial statements on the basis of the applicable financial reporting framework. In the case of the Province's consolidated financial statements, the applicable framework is legislation and PSAB standards. The onus is on the government to decide the accounting treatments it believes are most appropriate to use in accounting for transactions. If there is a disagreement on the application of the PSAB standards related to a material matter, this results in a qualified audit opinion, as the Auditor General's opinion has to be provided with reference to the PSAB standards.

As the preparer of its own financial statements, the government did not put forward adequate evidence to support its position to continue to recognize the $10.668 billion pension asset under PSAB standards. Instead, it passed legislation that enabled it to publicly disagree with our Office while at the same time avoiding a qualification on the 2015/16 annual deficit and accumulated deficit figures.

The legislation was used as a tool to prescribe an accounting treatment for the government. As we discuss later in our report, the government has and continues to issue selective regulations rather than apply independently established accounting standards.

Notably, however, the regulation did not extend this accounting treatment to the prior comparative fiscal year ended March 31, 2015, and this ultimately served as the basis for the Auditor General's qualified opinion because the same error in the comparative information should have been corrected under PSAB standards. We communicated this concern the day after we received the September 29, 2016, version of the March 31, 2016, consolidated financial statements.

3.6 Release of Unaudited Financial Statements

Our Office was disappointed that the government decided to release the consolidated financial statements without the Auditor General's audit opinion on October 3, 2016. On the morning of October 3, 2016, prior to the release of the consolidated financial statements, we were still in discussions with management about the pension asset issue (its presentation in the statements and the related note disclosures) following receipt of the September 29, 2016, version (the updated draft of the consolidated financial statements). We had met that morning with the Minister of Finance, the Minister

responsible for Treasury Board, their Deputy Ministers and their Chiefs of Staff, and left the meeting with the impression they would get back to us with amended draft statements.

In its news release, the government maintained that the unaudited financial statements were released to ensure openness and transparency, yet the manner in which this was done had taken our Office by surprise. Despite meeting earlier in the day to discuss the financial statements, there was no indication from the government that it planned to release these statements later that day. In fact, the Chief of Staff of the Minister of Treasury Board Secretariat notified the Auditor General in an email of the decision to release the statements, only 50 minutes before their technical briefing to the media.

This is the first time that unaudited consolidated financial statements for the province of Ontario have been released.

While it was disappointing that the government took this unprecedented step, at the same time it also provided resolution to the ongoing pension asset issue as the government then affirmed that the released unaudited financial statements were to be the final consolidated financial statements and no further changes were to be expected. On this note and upon receipt of the signed management representation letter, the Auditor General was then able to provide her opinion on October 5, 2016.

3.7 Basis for Qualified Opinion

Although the government correctly adjusted this year's deficit to include a $1.514 billion increase to pension expense and an increase of $10.668 billion to the pension liabilities, it did not process this adjustment correctly because it did not make the same adjustment for the same error that existed in the prior year comparative period.

The restatement of the comparative period is required under PSAB standards because the prior period adjustment is significant enough that it could affect decisions made by users of the Province's consolidated financial statements. Of further concern is that, by not restating, the government demonstrates a lack of transparency on the nature of the adjustment of the pension assets as a correction of an error in prior periods.

PSAB standards state that "the nature of the government requires a degree of transparency in financial reporting that most private sectors do not offer. The level of understanding of government finances held by most financial statement users demands this greater transparency. Governments are accountable to taxpayers on many levels, in contrast to the more limited accountability a company has for return on investment to a limited group of investors." With these reasons in mind, the lack of the restatement of the 2015 comparative period has resulted as the basis for the qualified audit opinion.

3.8 Other Matter Paragraph

Consistent with prior years, the audited consolidated financial statements and the auditor's report are included in the Public Accounts Annual Report (Annual Report), which also consists of the financial statement discussion and analysis (FSD&A). The FSD&A provides a high-level summary of the fiscal year's results, including analysis of the significant variances between the current fiscal year's actual results and the previous fiscal year's budget and actual results, as well as significant financial trends.

In accordance with Canadian Auditing Standards, our Office has the responsibility to read the Annual Report to ensure that the integrity of the audited consolidated financial statements are not undermined by contradictory information in other annual report sections, such as the FSD&A.

The Other Matter paragraph draws attention to the fact that the comparative periods disclosed in the FSD&A also have not been restated for the pension asset accounting prior period adjustment. Given the materiality of the amounts related to prior periods, the discussion and analysis of the fiscal year's results would, if the amounts were restated, be materially different from the current version.

3.9 Discussion of the Accounting Treatment of a Pension Asset

A pension asset generally arises when the government's total contributions to a plan (plus interest earned thereon) is greater than the pension expense recognized for employee service since the plan's inception.

In addition, PSAB standards limit the carrying amount of the pension asset. The limit requires a government to record a valuation allowance for any excess of the pension asset over the government's "expected future benefit." In other words, the limit calculation caps the pension asset at an amount equal to the government's expected future benefit. Subsequent changes in a valuation allowance are recorded in the consolidated statement of operations in the period that the change occurs.

As shown in Note 6 to the consolidated financial statements, the Province recorded a valuation allowance against the total amount of pension assets related to OTPP and OPSEU as at March 31, 2016. Essentially, the expected future benefit of the pension assets was determined to be zero.

A government's expected future benefit is the benefit a government expects to realize from a pension plan's surplus. The benefit can be in the form of reductions in future required contributions or cash withdrawal of the surplus.

PSAB standards provide guidance on the factors to consider in determining whether a benefit should be included in the calculation of a government's expected future benefit. For example, expected future benefit excludes any surplus withdrawals to which the government is not currently entitled, such as those subject to the approval of employees, an appropriate regulatory authority, or a court of law, where no such approval has been granted.

The standards specifically state that a government may not *anticipate* obtaining a legally enforceable right to withdraw a portion of a plan surplus to which it is not currently entitled, whether on the basis of precedent or otherwise. The same concepts are applicable when determining the government's ability to reduce its future minimum contributions.

After reviewing the agreements governing the jointly sponsored pension plans, we determined that the government does not have the unilateral right to reduce contributions without reaching a formal agreement with the plans' joint sponsors. As a result, we concluded that the government did not have a legally enforceable right to benefit from the pension assets because agreement from the joint sponsors was not obtained for either the current or prior fiscal year.

For greater certainty, we also examined whether the pension assets met the definition of an asset laid out in the financial statement concepts that underpin all PSAB standards. This guidance defines assets as economic resources controlled by a government as a result of past transactions or events, and from which it expects to obtain future economic benefits. The three essential characteristics of assets are:

- They must embody future economic benefits that involve a capacity, singly or in combination with other assets, to provide goods and services, to provide future cash inflows, or to reduce cash outflows.
- The government can control the economic resource and access to the future economic benefits.
- The transaction or event giving rise to the government's control has already occurred.

The first characteristic could potentially be met as the asset offers the potential for either reduced future cash inflow or reduced cash outflows in the form of a surplus withdrawal or a reduction in future contributions. A further option is that benefits could be increased to members.

However, the second characteristic is not met because the government does not control access to the benefits of the plan surplus, including taking any unilateral actions to change its contribution amounts, taking contribution holidays, or withdrawing surplus. Under both plan agreements, these actions require negotiation and agreement between the two joint sponsors. No transaction or event has occurred to give the government this legally enforceable right and, as a result, the

government has neither control, nor access to the assets. As a result, the third characteristic also is not met. Therefore, we could not conclude that the pension assets reported by the Province met the definition of an asset as at March 31, 2016 or in prior years.

The result of applying PSAB standards is an adjustment to recognize a valuation allowance against the total amount of pension assets to reflect an expected future benefit of zero. This is also consistent with the application of the fundamental concepts in the standards on recognition of assets.

Our position that a full valuation allowance against a reported pension asset should be recognized is consistent with the application of PSAB standards used by both British Columbia and New Brunswick in preparing their consolidated financial statements.

RECOMMENDATION 1

We recommend that the Treasury Board Secretariat and the Ministry of Finance finalize their position on the pension asset issue.

RESPONSE FROM TREASURY BOARD SECRETARIAT IN CONJUNCTION WITH MINISTRY OF FINANCE

To inform the Province's accounting treatment for pension plans, the government has established an Expert Advisory Panel (Panel) that will provide advice on the interpretation of Public Sector Accounting Standards (PSAS) to the Province's net pension assets.

The Panel's recommendations will inform the Province's final position paper on accounting for net pension assets, which will be shared with the Office of the Auditor General.

3.10 Office of the Provincial Controller Division

The Office of the Provincial Controller Division (OPCD) plays an essential role in the preparation of the Province's consolidated financial statements. It also ensures effective financial management, accounting and control of programs, activities and resources by providing timely accurate advice. This includes providing accounting and financial advice to ministries, working with the Office of the Auditor General and alerting senior officials to significant issues.

With accounting standards changes and the need to account for new and increasingly complex transactions that need to be reflected in the consolidated financial statements, this invariably creates significant workload pressures for OPCD staff. As well, staffing changes add to the challenges faced by OPCD.

Despite these pressures, it is important for our audit that OPCD has the capacity to adequately address accounting issues on a timely basis as they arise. This includes the timely preparation of position papers on these issues to support both the preparation and audit of the consolidated financial statements.

RECOMMENDATION 2

In order to ensure that appropriate, timely and complete information is provided to the Office of the Auditor General during the conduct of the audit of the consolidated financial statements for the Province of Ontario, the Office of the Provincial Controller Division should:

- proactively alert senior officials in the Treasury Board Secretariat and the Ministry of Finance to significant issues that arise during the course of the annual audit;
- provide the Office of the Auditor General with complete and timely position papers on significant accounting issues that detail its accounting positions and support for those positions; and
- strengthen and increase internal resources dedicated to providing accounting advice and preparing and finalizing the consolidated financial statements.

OFFICE OF THE PROVINCIAL CONTROLLER DIVISION RESPONSE

As part of the audit planning process for the 2016/17 Public Accounts, the Office of the Provincial Controller Division will work with the OAG to ensure a common understanding of all issues.

3.11 Government's Use of External Advisers

The government engages external advisers throughout the year in various capacities that include providing accounting analysis, advice and interpretation. The interests of the Treasury Board Secretariat, the Ministry of Finance and the Office of the Auditor General are best served when there is full disclosure on the intent and use of external advisers. For this reason, any work performed by external advisers in formulating an accounting position should be shared with the Office of the Auditor General as soon as possible, as part of the audit of the consolidated financial statements.

RECOMMENDATION 3

Given that the Office of the Auditor General is the appointed auditor for the consolidated financial statements of the Province of Ontario, and in the interest of ensuring that all information is provided to the Office of the Auditor General on a timely basis, the Treasury Board Secretariat should:

- provide copies of contracts with the expert advisers it uses for accounting advice and opinions in order to ensure that the Office of the Auditor General understands the work that the expert advisers are performing and the impact it has on the annual audit; and
- request that their external advisers, engaged to provide accounting advice and opinions related to the public accounts audit, notify the Office of the Auditor General of the engagement as required by the Code of Professional Conduct of the Chartered Professional Accountants of Ontario.

TREASURY BOARD SECRETARIAT RESPONSE

We will ensure that information required to be provided under professional standards is shared with the Office of the Auditor General.

4.0 Use of Legislated Accounting Standards

PSAB standards are largely accepted by federal, provincial, territorial and local governments as the basis for the preparation of their financial statements.

However, as standards develop to address increasingly complex transactions, especially when the standards have a significant impact on the accounting for and measurement of transactions affecting a government's annual deficit or surplus, or net debt, governments may become more reluctant to adopt them because of the potential to create volatility in annual results.

As discussed in our *2015 Annual Report*, the government passed legislation in 2009/10, 2011 and 2012 giving it the ability to make regulations for specific accounting treatments rather than apply independently established accounting standards. Ontario has passed legislation or amended regulations to enable it to prescribe accounting policies for its public-sector entities as follows:

- The *Investing in Ontario Act, 2008* (Act) and related regulations allows for the government to provide additional transfers to eligible recipients from unplanned surpluses reported in its consolidated financial statements. Any transfers made under the Act would be recorded as an expense of the government for that fiscal year, regardless of PSAB accounting standards.

- In the 2009/10 fiscal year, the *Education Act* and the *Financial Administration Act* were amended. The *Education Act* amendments specified that the government could prescribe accounting standards for Ontario School Boards to use in preparing financial statements. The *Financial Administration Act* amendments allow the government to prescribe accounting standards for any public or non-public entity whose financial statements are included in the province's consolidated financial statements.
- In 2011, a regulation under the *Financial Administration Act* directed Hydro One, at the time wholly owned by the Ontario government, to prepare its financial statements in accordance with U.S. generally accepted accounting principles, effective January 1, 2012. The government then told another wholly owned government business enterprise, Ontario Power Generation Inc. (OPG), to do the same. American accounting rules allow rate-regulated entities to defer current expenses for recognition in future years; the government's direction to adopt these U.S. rules came in anticipation of the planned Canadian adoption of International Financial Reporting Standards (IFRSs), which at the time did not allow for such deferrals.
- Ontario government regulations now require transfers for capital acquisitions and transfers of tangible capital assets to be accounted for by controlled transfer recipients as deferred contributions. The deferred amounts are to be brought into revenue by transfer recipients at the same rate as they recognize amortization expense on the related assets. We have supported this accounting because we believe that it best reflects the economic reality of the underlying transactions and complies with generally accepted accounting principles. PSAB standards in this area are being interpreted differently by many stakeholders.
- The 2012 budget further amended the *Financial Administration Act* to provide the government with full authority to make regulations regarding the accounting policies and practices used to prepare its consolidated financial statements.

We have raised this issue of the risk of the government's potential use of legislated accounting treatment on a number of occasions in our previous Annual Reports. It is critical that Ontario continue to prepare its financial statements in accordance with generally accepted accounting standards, specifically those of PSAB, in order to maintain its financial reporting credibility.

As the auditor of these statements, the Auditor General is required to opine on "whether the consolidated financial statements of Ontario, as reported in the Public Accounts, present fairly information in accordance with appropriate generally accepted accounting principles (GAAP)." If the government reported a deficit or surplus under legislated accounting standards that was materially different than what it would be under GAAP, the Auditor General would have no choice but to include a reservation in the audit opinion, as was done this year.

We have reported in the past that legislated accounting treatments have not yet resulted in the province's consolidated financial statements materially departing from PSAB standards.

RECOMMENDATION 4

We recommend the government follow the accounting standards established by PSAB, rather than using legislation and regulations to prescribe accounting treatments.

TREASURY BOARD SECRETARIAT RESPONSE

The Province is committed to providing high-quality financial reports that support transparency and accountability in reporting to the public, the legislature and other users.

For the 2015/16 Public Accounts, the government passed a time-limited regulation prescribing the accounting treatment for net pension assets in order to allow Treasury Board Secretariat and Ministry of Finance officials to sign off on Public Accounts.

The recommendations of the Expert Advisory Panel on Pension Assets will help to inform the government's decision on future accounting for pension assets under public sector accounting standards.

5.0 Update on Ontario's Debt Burden

In previous Annual Reports, we have commented on Ontario's growing debt burden, attributable to its large deficits in recent years and its investments in capital assets such as infrastructure, and we do so again this year.

We noted that the Province has relied on historically low interest rates to keep its debt-servicing costs relatively stable, but the debt itself, whether measured as total debt, net debt or accumulated deficit, continues to grow. **Figure 2** shows that the Province's debt levels continue to rise, though at a lower rate than projected last year.

- **Total debt** is the total amount of borrowed money the government owes to external parties. It consists of bonds issued in public capital markets, non-public debt, T-bills and U.S. commercial paper. Total debt provides the broadest measure of a government's debt load.
- **Net debt** is the difference between the government's total liabilities and its financial assets. Liabilities consist of all amounts the government owes to external parties, including total debt, accounts payable, pension and retirement obligations, and transfer payment obligations. Financial assets are those that theoretically can be used to pay off liabilities or finance future operations, and include cash, accounts receivable, temporary investments and investments in government business enterprises. Net debt provides a measure of the amount of future revenues required to pay for past government transactions and events.
- **Accumulated deficit** represents the sum of all past annual deficits and surpluses of the government. It can also be derived by deducting the value of the government's non-financial assets, such as its tangible capital assets, from its net debt.

5.1 Main Contributors to Net Debt

The Province's growing net debt since the end of the 2008/09 fiscal year is attributable to its large deficits in recent years, along with its investments in capital assets such as buildings, other infrastructure and equipment acquired directly or through public-private partnerships for the government or its consolidated organizations, such as public hospitals, as illustrated in **Figure 3**.

Figure 2: Total Debt, Net Debt, and Accumulated Deficit, 2010/11–2018/19

Sources of data: March 31, 2016 Province of Ontario Consolidated Financial Statements, 2016 Ontario Budget and Office of the Auditor General of Ontario

	Actual ($ million)						Estimate ($ million)		
	2010/11[1]	**2011/12[1]**	**2012/13[1]**	**2013/14[1]**	**2014/15[1]**	**2015/16[2,3]**	**2016/17[1,4]**	**2017/18[1,4]**	**2018/19[1,4]**
Total debt	236,629	257,278	281,065	295,758	314,960	327,413	331,148	336,700	343,200
Net debt[3]	214,511	235,582	252,088	267,190	284,576	305,233	308,315	316,900	326,800
Accumulated deficit	144,573	158,410	167,132	176,634	187,511	202,697	197,753	197,700	197,700

1. 2016 Ontario Budget.
2. 2015/16 Province of Ontario Consolidated Financial Statements.
3. 2015/16 Net debt includes a $10.7-billion adjustment made to record a pension-asset valuation allowance.
4. Amounts have not been adjusted for the effects of the pension adjustment made in 2015/16.

While annual deficits are projected to decline, the Province is still increasing its annual borrowings to finance these deficits, replace maturing debt and to fund infrastructure. In fact, the net debt is projected to continue to grow in absolute terms even after the Province starts to run annual budget surpluses. The Province can begin paying down its debt only when such future surpluses provide cash flows over and above the amounts required to fund government operations plus its net investments in tangible capital assets.

By the time the government projects it will achieve a surplus in 2017/18, Ontario's net debt will have almost doubled over a 10-year period, from $169.6 billion in 2008/09 to over $326.8 billion by 2018/19. We estimate total debt will exceed $343.2 billion by 2018/19.

To put this in perspective, the amount of net debt owed by each resident of Ontario on behalf of the government will increase from about $12,000 per person in 2008 to about $23,400 per person in 2019. In other words, it would cost every Ontarian $23,400 to eliminate the Province's net debt.

5.2 Ontario's Ratio of Net Debt to GDP

We noted a key indicator of the government's ability to carry its debt is the level of debt relative to the size of the economy. This ratio of net debt to the market value of goods and services produced by an economy (the gross domestic product, or GDP) measures the relationship between a government's obligations and its capacity to raise the funds needed to meet them. It is an indicator of the burden of government debt on the economy.

If the amount of debt that must be repaid relative to the value of the GDP is rising—in other words, the ratio is rising—it means the government's net debt is growing faster than the provincial economy, and becoming an increasing burden.

Figure 3: Net Debt Growth Factors, 2009/10–2018/19

Sources of data: March 31, 2016 Province of Ontario Consolidated Financial Statements, 2016 Ontario Budget and Office of the Auditor General of Ontario

	Net Debt Beginning of Year ($ million)	Deficit/ (Surplus) ($ million)	Net Investment in Tangible Capital Assets[1] ($ million)	Miscellaneous Adjustments[2] ($ million)	Net Debt End of Year ($ million)	Increase/ (Decrease) ($ million)
Actual						
2009/10	169,585	19,262	5,832	(1,090)	193,589	24,004
2010/11	193,589	14,011	7,306	(395)	214,511	20,922
2011/12	214,511	12,969	7,234	868	235,582	21,071
2012/13	235,582	9,220	7,784	(498)	252,088	16,506
2013/14	252,088	10,453	5,600	(951)	267,190	15,102
2014/15	267,190	10,315	6,509	562	284,576	17,386
2015/16	284,576	5,029	5,471	10,157[3]	305,233	20,657
Estimated						
2016/17[4]	305,233	4,300	11,200	(12,418)	308,315	3,082
2017/18[4]	320,733	–	12,400	(3,770)	316,945	8,630
2018/19[4]	333,133	–	14,200	(4,318)	326,827	9,882
Total over 10 years	–	**85,559**	**83,536**	**(11,853)**	–	**157,242**

1. Includes investments in government-owned and broader public sector land, buildings, machinery and equipment, and infrastructure assets capitalized during the year less annual amortization and net gains reported on sale of government-owned and broader public sector tangible capital assets.
2. Unrealized Fair Value Losses/(Gains) on the Ontario Nuclear Funds Agreement (ONFA) Funds held by Ontario Power Generation Inc. and accounting changes.
3. In addition to ONFA, the amount includes the impact of 2015/16 accounting treatment of pension assets.
4. Amounts have not been adjusted for the effects of the pension adjustment made in 2015/16.

Figure 4 shows that the Province's net-debt-to-GDP ratio gradually fell over a period of eight years, from a high of 29.3% in 2000/2001 to 26.0% in 2007/08. However, it has been trending upward since then, reflecting factors such as the 2008 global economic downturn, when tax revenues fell abruptly and significant increased borrowing to fund annual deficits and infrastructure stimulus spending.

The net-debt-to-GDP ratio for 2015/16 is 40.9%, which is 1% higher than what was projected for 2015/16 in the prior year. The increase is attributable primarily to the change in accounting treatment of public sector pension assets reported in the Province's consolidated financial statements. The change increased the 2015/16 pension and other post employment benefits liability by $10.668 billion and increased net debt by the same amount. The pension asset error was unknown to the government at the time it prepared the 2015/16 budget.

The government expects the ratio will begin falling, dropping to 38.9% in 2017/18 and 38.5% in 2018/19. We note a small improvement in the projected net-debt-to-GDP ratio from last year's estimates of 39.9% in 2016/17, and 39.3% in 2017/18. However, these projections do not reflect the effects of the annual pension asset adjustment of $1.5 billion made in 2015/16 that may also have to be made in 2016/17, 2017/18 and 2018/19.

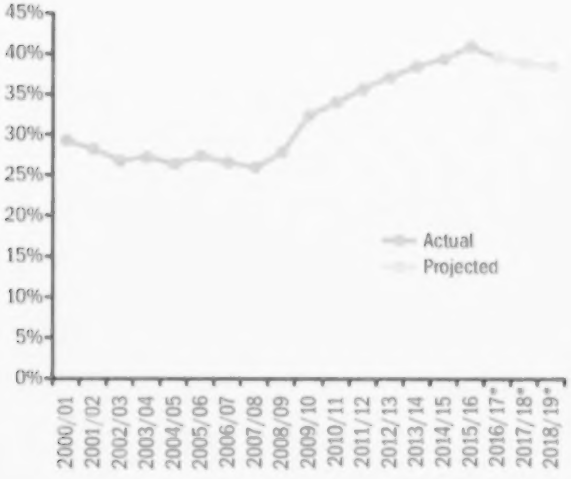
We noted in our 2015 Annual Report that many experts believe when a jurisdiction's net-debt-to-GDP ratio rises above 60%, that jurisdiction's fiscal health is at risk and is vulnerable to unexpected economic shocks.

We also noted it is somewhat of an oversimplification to rely on just one measure to assess a government's borrowing capacity, because that measure does not take into account Ontario's share of federal and municipal debts. If the Province's share of those debts was included in its indebtedness calculations, the net debt would be much higher. However, consistent with debt-measurement methodologies used by most jurisdictions, we have focused throughout our analysis only on the provincial government's own net debt.

Figure 5 shows the net debt of Ontario compared to other provinces and the federal government, along with their respective ratios of net debt

Figure 4: Ratio of Net Debt to Gross Domestic Product (GDP), 2000/01–2018/19

Source of data: March 31, 2015 and March 31, 2016 Province of Ontario Annual Report – Financial Statement Discussion and Analysis



Note: Net debt includes broader-public-sector net debt starting in 2005/06.

* Amounts have not been adjusted for the effects of the pension adjustment made in 2015/16.

Figure 5: Net Debt and the Net-Debt-to-GDP Ratios of Canadian Jurisdictions, 2015/16

Sources of data: Province of Ontario Annual Report and Consolidated Financial Statements; Annual Report and Consolidated Financial Statements of other provincial jurisdictions; Federal Budgets and budget updates, budgets of provincial jurisdictions; and the Office of the Auditor General of Ontario

	Net Debt ($ million)	Net Debt to GDP (%)
AB	(3,881)	(1.22)
SK	7,889	10.3
BC	39,635	16.2
MB	21,433	32.5
Federal	693,800	35.0
PEI	2,183	35.4
NS	15,097	37.9
ON	305,233	40.9
NB	13,660	41.3
NL	12,654	42.7
QC	187,098	49.6

to GDP. Generally, the western provinces have a significantly lower net-debt-to-GDP ratio than Ontario and the Atlantic provinces, and Quebec has a significantly higher ratio of net-debt-to-GDP than Ontario.

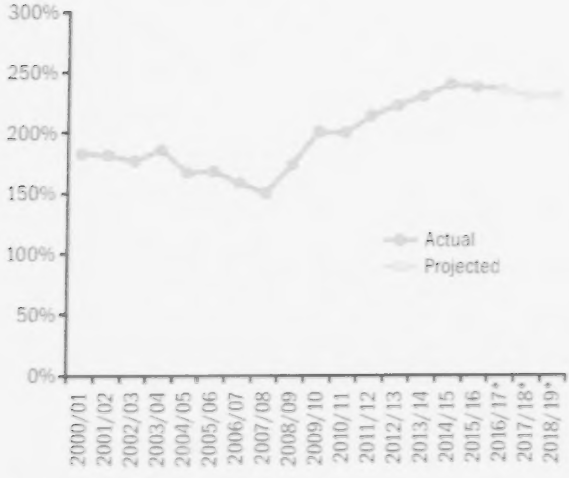
5.3 Ratio of Net Debt to Total Annual Revenue

Another useful measure of government debt is the ratio of net debt to total annual revenues, an indicator of how much time it would take to eliminate the debt if the Province spent all of its revenues on nothing but debt repayment. For instance, a ratio of 250% indicates that it would take 2½ years to eliminate the provincial debt if all revenues were devoted exclusively to it.

As shown in **Figure 6**, this ratio declined from about 183% in 2000/2001 to about 150% in 2007/08, reflecting the fact that, while the Province's net debt remained essentially the same, annual provincial revenue was increasing. However, the ratio has increased steadily since 2007/08 and is expected to top 236% by 2016/17 before beginning to fall. This increasing ratio of net debt to total annual revenue indicates the Province's net debt has less revenue to support it. Again, the 2016/17 projection does not reflect the pension asset adjustment made in 2015/16. The projection going forward with the impact of the pension asset adjustment is unknown.

Figure 6: Ratio of Net Debt as Percentage of Total Annual Revenue, 2000/01–2018/19

Sources of data: March 31, 2016 Province of Ontario Consolidated Financial Statements, 2016, 2015, 2009, 2008 Ontario Budgets, Office of the Auditor General of Ontario



* Amounts have not been adjusted for the effects of the pension adjustment made in 2015/16.

5.4 Ratio of Interest Expense to Revenue

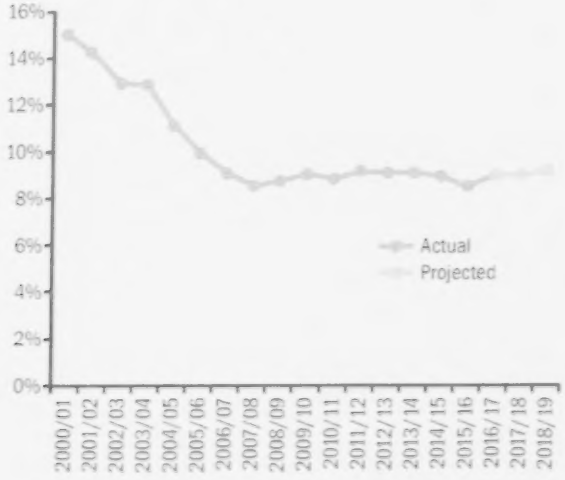
Increases in the cost of servicing total debt, or interest expense, can directly affect the quantity and quality of programs and services that government can provide: the higher the proportion of government revenues going to pay interest costs on past borrowings, the lower the proportion available for spending in other areas.

The interest-expense-to-revenue ratio illustrates the extent to which servicing past borrowings takes a greater or lesser share of total revenues.

As **Figure 7** shows, the Province's interest-expense-to-total-revenues ratio decreased steadily in the decade ending in 2007/08, due mainly to lower interest rates. Because rates have been at his-

Figure 7: Ratio of Interest Expense to Revenue, 2000/01–2018/19

Sources of data: March 31, 2016 Province of Ontario Consolidated Financial Statements, 2015, 2009, 2008 Ontario Budgets, Office of the Auditor General of Ontario



toric lows since the beginning of this decade, both the actual and projected interest-expense-to-total revenues ratio have held, and are expected to hold steady, at around 9.0% from 2009/10 to 2018/19, even as the Province's total borrowings are expected to increase by approximately $131.0 billion, or 62%, from $212 billion to over $343 billion over this same time period. This means that 9 cents of every dollar in revenue that the government collects will go towards paying interest on debt. Based on the government's latest projections, the ratio is expected to gradually increase to 9.2% by 2018/19, when total debt is expected to be around $343 billion.

The province's debt also exposes it to further risks, the most significant being interest-rate risk. As noted above, interest rates are currently at record low levels, enabling the government to keep its annual interest expense relatively steady even as its total borrowing has increased significantly. However, if interest rates rise, the government will have considerably less flexibility to provide public services because a higher proportion of its revenues will be required to pay interest on the province's outstanding debt. As was noted in last year's *Annual Report*, the government has mitigated its interest-rate risk to some extent by increasing the weighted average term of its annual borrowings in order to take advantage of the current low rates.

The ratio of interest-expense-to-revenue is expected to increase marginally beginning in 2018/19, indicating the government will have less flexibility to respond to changing economic circumstances. Past government borrowing decisions mean a growing portion of revenues will not be available for other current and future government programs.

5.5 Consequences of High Indebtedness

Our commentary last year highlighted the consequences for the Province of carrying a large debt load—and the same observations are relevant this year. They include the following:

- **Debt-servicing costs cut into funding for other programs:** As debt grows, so do interest costs. As interest costs consume a greater proportion of government resources, there is less to spend on other things. To put this "crowding-out" effect into perspective, the government currently spends more on debt interest than on post-secondary education.
- **Greater vulnerability to interest-rate increases:** Ontario has been able to keep its annual interest expense relatively steady, even as its total borrowing has increased significantly. For example, it was paying an average effective interest rate of about 8.4% in 1999/2000, but that dropped to 3.6% in 2015/16. However, if interest rates start to rise again, the government will have considerably less flexibility to provide public services as it will have to devote a higher proportion of its revenue to interest.
- **Potential credit-rating downgrades could lead to higher borrowing costs:** Prepared by specialized agencies, credit ratings assess a government's creditworthiness largely based on its capacity to generate revenue to service its debt. They consider such factors as a government's economic resources and prospects, industrial and institutional strengths, financial health, and susceptibility to major risks. A credit rating affects the cost of future government borrowing, with a lower rating indicating that an agency believes there is a relatively higher risk that a government will default on its debt. Accordingly, investors will lend to that government only in return for a greater risk premium, in the form of higher interest rates. A rating downgrade could also shrink the potential market for a government's debt, because some investors will not hold debt below a certain rating.

5.6 Final Thoughts

We recognize that, ultimately, decisions about how much debt the Province should carry, and the strategies to pay down that debt, are questions of government policy. However, as we observed last year, this should not prevent the government from providing information to promote a greater understanding of the issue and clarify the choices it is making, or will make, to address it.

We continue to believe that in light of the government's plan to eliminate its annual deficit by 2017/18, and given that its debt-carrying costs are expected to rise from their current historic lows, this would be a good time for the government, legislators and the public to continue to keep an eye on the level of debt on Ontario and the relationship of net debt to GDP.

While annual deficits are projected to decline, the Province continues to increase its borrowings annually to finance these deficits, replace maturing debt and fund infrastructure. In fact, the net debt is projected to continue growing in absolute terms even after the Province starts to run annual budget surpluses. The Province can begin paying down its debt only when such future surpluses provide cash flows over and above the amounts required to fund government operations and its net investments in tangible capital assets.

We noted that government debt has been described as a burden on future generations, especially debt used to finance operating deficits (debt used to finance infrastructure is more likely to leave behind tangible capital assets that benefit future generations). The government has presented a plan to eliminate its annual deficit in 2017/18 by restraining spending, and committed to subsequently reducing the net-debt-to-GDP ratio to the pre-recession level of 27%. Although the strategy that has been articulated is one where infrastructure spending will be used to spur the economy and increase GDP, thereby reducing the net-debt-to-GDP ratio (discussed in **Chapter 3** of our December 2015 Report titled *The Economic Development and Employment Program*) there is still a need to project the reduction of the net-debt-to-GDP ratio in the future, taking into account the impact of both infrastructure spending and economic development programs. However, there is no discussion yet around the paying down of debt.

Regardless of what strategy is being contemplated, we believe the government should provide legislators and the public with long-term targets for its plans to address current and projected debt. Therefore, we are reiterating our recommendation from last year.

RECOMMENDATION 5

In order to address the Province's growing total debt burden, the government should work toward the development of a long-term total-debt reduction plan that is linked to its target of reducing its net debt-to-GDP ratio to its pre-recession level of 27%.

TREASURY BOARD SECRETARIAT RESPONSE

The government plans to invest about $160 billion in capital over 12 years that will, in addition to addressing much needed infrastructure requirements, improve the economic growth of the Province. A September 2015 report by the Centre for Spatial Economics found that, on average, investing $1 in public infrastructure in Canada raises GDP by $1.43 in the short term and up to $3.83 in the long term.

Once balance is achieved in 2017/18, increases to net debt will be limited to the difference between the cash investment to build the assets and the amortization which is a non-cash amount. The balanced budget and the government's continued focus on capital investment will add to economic growth, resulting in GDP growing more quickly than debt, and lowering the net debt-to-GDP ratio to the government's 27% target.

6.0 Significant Accounting and Reporting Issues

6.1 Consolidation of Hydro One and Ontario Power Generation

PSAB standards direct government business enterprises (GBEs) to follow the accounting rules applicable to publicly accountable enterprises and prepare their financial statements using International Financial Reporting Standards (IFRS) effective for the fiscal year beginning on or after January 1, 2011. IFRS is the Canadian generally accepted accounting principles applicable to these enterprises.

Three of the five GBEs that are consolidated by the Province report financial results under IFRS as required by PSAB standards (i.e., Brampton Distribution Holdco Inc., Liquor Control Board of Ontario and Ontario Lottery and Gaming Corporation). The other two GBEs, Hydro One and Ontario Power Generation (OPG), do not report under Canadian generally accepted accounting principles (i.e., IFRS) and instead have used U.S. generally accepted accounting principles (U.S. GAAP) since 2012.

The transition to U.S. GAAP was brought about by the Ontario Regulation 395/11 which the government passed in response to the decision made by the Chartered Professional Accountants of Canada (formerly the Canadian Institute of Chartered Accountants) Accounting Standards Board (AcSB) to adopt IFRS for all publicly accountable enterprises. At the time, U.S. GAAP had provisions to cover the accounting by corporations whose rates are regulated by an independent, third party regulator, but IFRS did not. The use of rate regulated accounting is under review by both the AcSB and the International Accounting Standards Board (IASB). Rate regulated accounting is discussed in further detail later in this report.

The AcSB had issued multiple extensions to rate-regulated organizations to allow them to continue to use the "pre-changeover accounting standards" (i.e., former Canadian GAAP prior to adoption of IFRS) that included provisions for rate-regulated accounting up to January 1, 2015.

Since 2012/13, even though Hydro One and OPG have been using U.S. GAAP for their stand-alone financial statements, these financial statements have been converted to the former Canadian GAAP for inclusion in the Province's consolidated financial statements.

In January 2014, the IASB issued an interim IFRS standard that permits first-time adopters of IFRS to continue their previous GAAP accounting for regulatory deferral account balances, with limited presentation changes. This interim IFRS standard was effective for annual periods beginning on or after January 1, 2015.

Hydro One and OPG both have December 31 fiscal year-ends. The Province's accounting policy is to adopt in-year accounting policy changes to the next full provincial fiscal year. As such, the Province continued to consolidate Hydro One and OPG in the 2014/15 fiscal year based on the results under the former Canadian GAAP.

We examined the differences between IFRS and the former Canadian GAAP at the time and concluded that the estimated differences had no material effect on the annual deficit.

Recognizing that the government was choosing to continue to use U.S. GAAP and not IFRS for consolidation of the financial results of OPG and Hydro One in the Province's consolidated financial statements, we requested and received from OPG and Hydro One's attest auditors, through specified procedures, the differences for 2015/16 between U.S. GAAP and IFRS. We relied on their work for consolidation purposes.

In February 2016, the Treasury Board Secretariat wrote CPA Canada's Accounting Oversight Committee and PSAB requesting that the PSAB standards recognize U.S. GAAP as a basis of reporting by publicly accountable enterprises because the current standards only refer to IFRS. The government noted that by excluding reference to other

sources of GAAP, PSAB mandates that GBE results must be reflected on an IFRS basis. The government expressed concern that this could result in materially different and inconsistent results in the Province's consolidated financial statements than if the rate regulated entities (Hydro One and OPG) results were consolidated on a U.S. GAAP basis. PSAB responded in July 2016 that the PSAB standards would not be changed and all GBEs should prepare their financial statements in accordance with IFRS and not U.S. GAAP.

Despite the response, with the former Canadian GAAP no longer being an option, the government chose to consolidate Hydro One and OPG results under U.S. GAAP in 2015/16 as opposed to consolidating them on an IFRS basis, as required under PSAB standards. We examined the differences between IFRS and U.S. GAAP accounting standards, highlighted by Hydro One and OPG attest auditors, and concluded that these estimated differences had no material effect on the annual deficit. We recorded these differences on our summary of unadjusted audit differences. In addition, we requested that the Province disclose these differences. It disclosed this information in Note 12 to its Consolidated Financial Statements.

We will continue to track these differences in subsequent audits until the government adopts IFRS for the purposes of consolidating the results of OPG and Hydro One, as required. Given the differences in how certain balances are treated under U.S. GAAP versus IFRS, we anticipate that these differences could become material in future fiscal years, potentially as soon as the 2016-17 fiscal year.

RECOMMENDATION 6

We recommend that the Province of Ontario include Hydro One and OPG financial information in the consolidated financial statements using the IFRS reporting framework as required by PSAB standards.

TREASURY BOARD SECRETARIAT RESPONSE

Treasury Board Secretariat will continue to work with the Public Sector Accounting Standards Board and the Office of the Auditor General to ensure that the Province's financial reports support transparency and accountability to the public and other users.

6.2 Contaminated Sites

A new PSAB standard came into effect for the fiscal year ending March 31, 2015. It requires the province's liability for contaminated sites to be updated to incorporate any changes that have occurred during each fiscal year.

Examples of changes that would affect the liability estimate include:

- identification of new sites where contamination may exist and assessment, remediation and monitoring may be required;
- additional remediation work performed on existing sites; or
- new information that becomes available about a site following more in-depth assessments or the advent of new technology.

As part of our Public Accounts audit for fiscal year ending March 31, 2016, we examined the liability for contaminated sites and the changes that occurred throughout the fiscal year. The liability balance as at March 31, 2015, was $1.792 billion, which decreased to $1.751 billion as at March 31, 2016. Although there were some new accruals added, the majority of the change is due to amounts spent to remediate sites, which lowered the liability.

We also reviewed sites that were not included in the estimate to ensure the criteria for recognition and disclosure under the PSAB standard were appropriately assessed. We agreed with the relevant ministries' conclusion for not including these specific sites since the PSAB criteria were not met. The ministries will monitor these sites for any changes in the future that may have an effect on the liability for contaminated sites.

For the fiscal year ending March 31, 2016, we are satisfied with the completeness of the ministries' efforts to identify all high-risk sites and to provide a reasonable estimate of the liability reported under PSAB standards.

RECOMMENDATION 7

To ensure that the Province's ongoing contaminated sites liability is reasonably and consistently calculated, the Office of the Provincial Controller Division should continue to work with the ministries to ensure that the Public Sector Accounting Board standards continue to be applied effectively in accounting and measuring these liabilities.

OFFICE OF THE PROVINCIAL CONTROLLER DIVISION RESPONSE

We are pleased that the Auditor General was satisfied with the completeness of the ministries' efforts to identify all high-risk sites and to provide a reasonable estimate of the liability reported under PSAB standards. Treasury Board Secretariat will continue to work with line ministries to support effective reporting in accordance with public sector accounting standards.

6.3 Financial Statement Presentation and Disclosure

Financial-statement presentation disclosures (disclosures) are integral to the financial statements, helping to clarify or further explain items in the statements. PSAB standards stipulate that, when applicable, disclosures be provided under the specific accounting items.

Our Office performed a refresh review of Ontario's disclosures to assess whether further improvements were needed. We used the Province's 2014/15 Consolidated Financial Statements as the basis for our analysis, and undertook a jurisdictional review of Canada's senior governments' financial statements to support our analysis.

Our review concluded that while the disclosures used to prepare the consolidated financial statements conformed in almost all cases, there were instances where disclosures can be improved.

The results of our jurisdictional review showed that the application of the disclosure requirements established by PSAB varied in depth and quality. Ontario was more detailed than some of the other provinces in providing disclosures in certain areas, while also having less detailed disclosures in other areas. Areas for improvement were communicated to the Office of the Provincial Controller Department (OPCD) during our 2015/16 audit. For example, there is still room for improvement in pension and revenue disclosures.

We provided OPCD with our jurisdictional analysis of pension reporting by other senior governments, and noted that many provinces have more robust disclosures than Ontario's. Although OPCD expanded its pension disclosures in the 2015/16 consolidated financial statements as a result of our review, there are still areas for further improvement such as disclosures at the plan level (e.g., net obligation and expense) that would be useful for a user.

Our jurisdictional review also noted that Ontario provided fewer detailed disclosures in the notes to the consolidated financial statements for revenue than other provincial jurisdictions. Currently, the note disclosure for the revenue accounting policy is as follows:

> Revenues are recognized in the fiscal year that the events giving rise to the revenues occur and they are earned. Amounts received prior to the end of the year, which relate to revenues that will be earned in a subsequent fiscal year, are deferred and reported as liabilities.

Even though this disclosure is adequate and does not depart from PSAB standards, we believe it is possible to expand on accounting policies regarding revenues. For example, some provincial jurisdictions provide more revenue recognition information on the different types of revenues, such

as government transfers and royalties. Also, many provinces provide further disclosure on their tax revenue policies in their financial statements. For example, most provinces disclose revenue recognition for specific tax streams, such as corporate and personal income taxes.

We believe that in order to provide more detailed information to the public and to be consistent with other provincial jurisdictions, the government should consider providing additional revenue accounting policies disclosure.

The C.D. Howe report entitled *The Fiscal Accountability of Canada's Senior Government, 2016* noted that "[a]ccountability and transparency are watchwords for good governance in the early 21st century. And the bar is rising."

Disclosures are integral to the financial statements and are instrumental in providing key information to the users of the financial statements for both accountability and transparency, the report noted. It should be noted that the report assessed the quality of financial information presented by Canada's senior governments, and gave Ontario top presentation marks, just behind two other provinces, for financial reporting practices based on the presentation of certain financial actual and budget results.

We will continue our dialogue with OPCD to extend the current disclosures to enhance accountability and transparency.

RECOMMENDATION 8

To further improve the accountability and transparency of Ontario's Consolidated Financial Statements for users, the Office of the Provincial Controller Division should expand note disclosures in the consolidated financial statements for pensions and revenues.

OFFICE OF THE PROVINCIAL CONTROLLER DIVISION RESPONSE

The Office of the Provincial Controller Division will review this recommendation and work with the Office of the Auditor General in the upcoming year.

6.4 Annual Report Financial Statement Discussion and Analysis

Each year the government provides a Financial Statement Discussion and Analysis (FSD&A) in its annual report to help the public understand the Province's consolidated financial statements.

An FSD&A's objective is to help users of the statements understand the impact of economic conditions and of government decisions on the Province's financial results for the year, and its financial position at year end.

In our *2015 Annual Report*, we recommended the government consider the guidance outlined in the Public Sector Accounting Board's (PSAB) Statements of Recommended Practice (SORP) in preparing the FSD&A for its annual report.

The government implemented the following changes to address our recommendation, which are listed in its introduction to the FSD&A:

- expand the comparison of the current year's results to those of the prior year, and include analysis of the trends over a five-year period as related to several financial items, including an expanded discussion on balance sheet items;
- provide a description of the Province's capital assets, reflecting their importance in service delivery and their impact on the Province's financial condition; and
- include a discussion of key risks that could impact the Province's financial results.

While we acknowledge the government's effort to improve the FSD&A, the government's decision to not restate the prior year comparatives for the pension assets in its consolidated financial statements for 2015/16 is a non-compliance-with-PSAB-standards issue. This concern broadens to the FSD&A as the financial highlights, variance analysis and trend assessments do not reflect financial results in accordance with PSAB standards.

7.0 Significant Other Matters

7.1 Sale of Hydro One Shares and Hydro One Brampton

In June 2015, the government passed the *Building Ontario Up Act, 2015* (Act) to permit the sale of up to 60% ownership of Hydro One. The Act requires the Province to retain at least 40% ownership in the company and restricts other shareholders from individually holding more than 10% of the total equity of Hydro One.

In November 2015, the Province sold approximately 16 per cent of Hydro One's common shares at a price of $20.50 each through an initial public offering (IPO). An accounting gain of $783 million was recorded as a result of the sale of these common shares through the IPO. As of March 31, 2016, the Province owned approximately 84 per cent of Hydro One's common shares. The financial results of Hydro One's operations were consolidated into the Province's financial results based on the Province's proportionate ownership share at year end.

In addition, Hydro One declared and paid an $800-million special dividend to the Province prior to the IPO. The Province subsequently remitted this amount to the Ontario Electricity Financing Corporation (OEFC) to be recorded against outstanding amounts due from the Province relating to cumulative electricity sector dedicated earnings, which are the cumulative combined net income of Hydro One and Ontario Power Generation in excess of the Province's interest cost on its investment in hydro companies dedicated to help retire OEFC's debt balance.

As a 100%-owned provincial Crown corporation, Hydro One was exempt from corporate taxes prior to the IPO. Despite its tax-exempt status, Hydro One was required to make payments in lieu of corporate taxes (PILs) to the Province in accordance with the *Electricity Act, 1998*. However, when the Province sold off more than 10% of Hydro One, this exemption ended, and Hydro One became subject to federal and provincial corporate income taxes.

Immediately before exiting the corporate PILs regime, Hydro One was deemed to have disposed of its assets for PILs/tax purposes at proceeds equal to the fair market value of its assets. Under the *Electricity Act, 1998* as a result of this deemed disposition, Hydro One had to make a one-time PILs payment to the Province, a "departure tax," of $2.6 billion.

The Province made a $2.6-billion capital contribution to Hydro One to facilitate Hydro One's cash payment of the departure tax. This capital contribution increased the book value of the Hydro One common shares held by the Province (100% at that time). The capital contribution was factored into the calculation of the accounting gain recorded by the Province noted above.

The deemed disposition of Hydro One's assets and related payment of the departure tax gave rise to a deferred tax asset that reflects reduced cash taxes payable by Hydro One in future tax periods. The Province's proportionate share of the deferred tax benefit as of March 31, 2016, increased the Province's revenues by $2.4 billion.

Overall, the Province's sale of Hydro One shares generated a one-time reduction to the annual deficit of approximately $3.2 billion, comprised of the Province's $2.4-billion portion of the deferred tax asset benefit and the $0.8-billion accounting gain on the sale of the shares. The departure tax payment did not affect the 2015/16 annual deficit as the additional $2.6 billion in tax revenue recognized by the Province as Other Tax Revenue was offset by an equal reduction in Hydro One's net income of $2.6 billion due to the higher tax expense. Hydro One's net income is consolidated with the Province's financial results under Income from Government Business Enterprises.

In April 2016, subsequent to the fiscal year end, the Province sold approximately 14% more of Hydro One's common shares, at a price of $23.65 each, in a secondary share offering. This sale brought the Province's ownership stake in Hydro One down to approximately 70%. Barring any additional share sales prior to the end of the 2016/17 fiscal year, Hydro One's financial results will be

consolidated into the Province's financial results on a proportionate share basis at this 70% level. We will examine the secondary sale of Hydro One shares and the related accounting gain during our 2016/17 audit.

Prior to the IPO, Hydro One transferred all of the outstanding shares of its former subsidiary, Hydro One Brampton, to the Province, the sole shareholder of Hydro One at the time, at their net book value. The plan at the time was to sell the Hydro One Brampton shares separately from the Hydro One IPO.

On March 24, 2016, the government announced a tentative share sale agreement with three municipally-owned local hydro distribution companies for the Province's shares of Hydro One Brampton at a price of $607 million, subject to closing conditions including approval by the Ontario Energy Board. As part of next year's audit of the Public Accounts, we will examine the sale of the shares of Brampton Hydro One and the related accounting gain when the transaction is completed, expected in late 2016.

7.2 Ontario Trillium Trust

The *Trillium Trust Act, 2014* (Act) provides for an account to be maintained in the Public Accounts to track the prescribed amounts of financial benefits to Ontario from the sale of qualifying assets under the Act. The Act also requires the account to record all expenditures made under the Act to support infrastructure investments. A report on the financial activities of the Trillium Trust is included in Volume 1 of the Public Accounts. It should be noted that the Ontario Trillium Trust is not a separate legal trust with its own funds; it is the name of an account within the consolidated revenue fund set up to track transactions in accordance with the *Trillium Trust Act, 2014*.

Volume 1 shows that $1.35 billion was notionally allocated to the Trillium Trust as at March 31, 2016, in relation to the sale and redemption of the Province's shares in General Motors in prior years. Subsequent to year end, in August 2016, the Province filed a regulation allocating an additional $3.2 billion to the Trillium Trust related to the sale of Hydro One common shares in 2015/16.

By creating a separate account to track transit and transportation expenditures, the Province's intention is to match transit and transportation expenditures to the revenues allocated to the same account. In substance, the Trillium Trust is an account established in the Public Accounts to track revenue gains (including non-cash benefits) from the sale of designated assets that the government has restricted in legislation to be matched to certain government infrastructure projects such as investments in roads, bridges and public transit.

Reporting in Volume 1 on the notional amounts credited to the Trillium Trust, and the notional amounts that are deemed spent from this account, is to reflect the government's public reporting of its commitments to use the amounts allocated to the Trillium Trust for infrastructure investments.

While we review Volume 1 as part of our audit of the Public Accounts we have not audited Volume 1. As a result, Volume 1 of the Public Accounts is marked as "Unaudited." However, going forward we will perform a detailed review on the transactions recorded in the Trillium Trust for compliance with the *Trillium Trust Act, 2014*.

7.3 Ontario Greenhouse Gas Reduction Account

Under the *Climate Change Mitigation and Low Carbon Economy Act*, all revenues from Ontario's cap-and-trade program would be deposited in the consolidated revenue fund and the amounts would be recorded in the new Greenhouse Gas Reduction Account.

Similar to the Ontario Trillium Trust, the Greenhouse Gas Reduction Account will allow the government to track and report to the public on its commitments that the spending allocated to different programs will be at least as much as the revenues collected under the cap-and-trade program.

It is anticipated the Province will begin to collect and deposit revenues into the consolidated revenue fund from cap-and-trade auctions in March 2017.

We will audit the receipts and disbursements recorded in the Greenhouse Gas Accounts for compliance with the *Climate Change Mitigation and Low Carbon Economy Act* and regulations during our Public Accounts audit.

7.4 Pension Economic Assumptions

The government is responsible to select appropriate economic assumptions to appropriately determine the pension liability and pension expense. The need to make assumptions in pension accounting is unavoidable.

The discount rate, determined by the government, is one of the key economic assumptions critical to the calculations that determine a sponsor's pension obligation and pension expense. Under PSAB standards, the government has the choice of setting this rate with reference to expected pension-plan asset returns or to the government's cost of borrowing (i.e., its long-term bond rate). Ontario has chosen to set the discount rate equal to the expected long-term plan asset returns. We discuss the basics of pension accounting further in **Chapter 4, Section 4.01** of this Annual Report.

On an annual basis, we evaluate the key pension economic assumptions, including the discount rate, inflation rate and salary-escalation rate. This year, we engaged an external expert adviser to assist us in reviewing these key economic assumptions. Based on the work we have performed this year, we were generally satisfied that these rates were reasonable. However, we have noted that in the 2015/16 fiscal year, the discount rates are edging towards the high end of a reasonable range.

RECOMMENDATION 9

We recommend that the Treasury Board Secretariat and the Ministry of Finance benchmark and review the 2016/17 pension economic assumptions for reasonableness.

RESPONSE FROM TREASURY BOARD SECRETARIAT IN CONJUNCTION WITH MINISTRY OF FINANCE

The 2016/17 pension economic assumptions will be reviewed as part of the process for setting the assumptions for 2017/18. Assumptions from prior years are reviewed based on long-term trends, actual experience and future expectations over the previous year. Decisions are made at that time whether any changes are warranted.

8.0 Financial Reporting Frameworks and Canadian Auditing Standards

The Canadian Auditing Standards (CASs) provide a number of different acceptable frameworks for the preparation of financial statements. As described in **Figure 8**, a financial reporting framework may be general purpose or special purpose, and reflect either a fair presentation or a compliance presentation.

The standards do not specify a particular framework as being acceptable for general-purpose financial statements. Acceptable reporting frameworks include not only financial reporting standards of an established standard-setting organization such as the Public Sector Accounting Board (PSAB) or the Accounting Standards Board (AcSB) of CPA Canada, but also accounting standards established by law or regulation, or standards established by industry organizations.

As we noted in our *2013 Annual Report*, the expansion in acceptable reporting frameworks under CASs would provide governments with a mechanism for establishing accounting policies that could result in financial statements that were not fairly presented. For example, in preparing their

Figure 8: Financial Reporting Frameworks Under Canadian Auditing Standards

Source of data: CPA Canada Auditing and Assurance Standards Board

	General Purpose	Special Purpose
Fair presentation	• Meets the common needs of a wide range of users • Complies with an accounting framework (GAAP—full compliance with PSAB)	• Meets the needs of specific users • Complies with a special-purpose framework (GAAP or non-GAAP) • Explicit deviation from an accounting framework to achieve fair presentation of financial statements
Compliance presentation	• Meets the common needs of a wide range of users • Complies with a non-GAAP accounting framework (i.e., requirements of legislation and/or regulation)	• Meets the needs of specific users • Complies with a special-purpose framework (i.e., internal guideline)

general-purpose financial statements, the Province and its public-sector entities could follow legislated accounting policies that were not in accordance with generally accepted accounting standards, and still obtain an independent auditor's report without reservations.

Generally, if a financial reporting framework established by a law or regulation does not materially differ from the results produced by the standards established by an independent standard-setting organization, then that framework will not affect the independent auditor's fair presentation report on the financial statements prepared under that framework. However, if the legislated financial reporting framework departs from generally accepted accounting standards, a number of issues arise. We believe users of government and public-sector-entity financial statements need to be aware of these issues.

Until the 2010/11 fiscal year, all public-sector entities in Ontario used a reporting framework that was in accordance with PSAB standards.

However, Ontario's 72 school boards now prepare their financial statements using a legislative accounting framework rather than that of PSAB standards, and receive an auditor's report indicating whether the statements comply with the legislated framework. There is no longer a statement in the auditor's report that the financial statements are "fairly presented."

Two of Ontario's electricity-sector entities, Hydro One and OPG, prepare their financial statements under legislation that requires them to use U.S. generally accepted accounting principles rather than Canadian generally accepted accounting principles (i.e. IFRS) as required by PSAB standards. Their auditors provided them with an auditor's report without reservation, as allowed under Canadian Auditing Standards.

To date, these departures from PSAB and CPA Canada AcSB standards for preparing Ontario public-sector-entity financial statements have not had a material impact on the Province's deficit, its net debt or its accumulated deficit. Accordingly, they have not affected our report on the Province's consolidated financial statements.

However, users of public-sector financial statements may not even realize when public-sector entities are not complying with PSAB standards, because audit reporting standards do not require this to be specifically disclosed. Instead, users must now carefully review the wording of auditor's reports and examine the notes to any public-sector entity financial statements to understand the accounting basis on which the financial statements have been prepared.

We believe that accounting standards recommended by Canadian independent standard-setters should form the basis for the preparation not only

of the Province's consolidated financial statements, but the financial statements of all other public-sector organizations. Financial statements prepared on such a basis are credible, consistent and comparable, enhancing their usefulness. Allowing preparers to choose to adopt their own accounting standards could undermine these attributes. It could also negatively affect the transparency, credibility and, accordingly, the usefulness of the resulting financial statements.

For that reason, most Canadian governments use PSAB standards in preparing their annual budgets, printed estimates, economic updates and year-end consolidated financial statements. When governments use the same set of accounting standards to prepare key financial reports, the public can evaluate expected financial performance against actual results and against the results of other jurisdictions. PSAB standards are intended to help governments publicly demonstrate stewardship over the resources they manage, and thereby strengthen accountability to taxpayers.

9.0 Update on WSIB

The Workplace Safety and Insurance Board (WSIB) is a statutory corporation created by the *Workplace Safety and Insurance Act, 1997* (Act). Its primary purpose is to provide income support and medical assistance to workers injured on the job. The WSIB receives no funding from government; it is financed through premiums on employer payrolls.

Over the past decade, we raised a number of concerns about significant growth in the WSIB's unfunded liability, which is the difference between the value of the WSIB's assets and its estimated financial obligations to pay benefits to injured workers. Our 2009 Annual Report discussed the risk that the growth and magnitude of the unfunded liability posed to the WSIB's financial viability, including the ultimate risk of the WSIB being unable to meet its existing and future commitments to provide worker benefits.

We also urged the government to reconsider the exclusion of the WSIB's financial results from the Province's consolidated financial statements, particularly if there were any risks that the Province might have to provide funding to ensure the WSIB remained viable. The government excludes WSIB's financial results because it is classified as a "trust;" however, given the WSIB's significant unfunded liability and various other factors, we questioned whether the WSIB operates like a true trust. Including the WSIB in the government's consolidated financial statements would have a significant impact on the government's fiscal performance.

As of June 30, 2010, the WSIB's unfunded liability had grown to almost $13 billion. In September 2010, the WSIB announced an independent funding review to obtain advice on how to best ensure the long-term financial viability of Ontario's workplace safety and insurance system. The May 2012 report contained a number of recommendations, in particular calling for a new funding strategy for the WSIB with the following key elements:

- realistic assumptions, including a discount rate based on the best actuarial advice;
- moving the WSIB as quickly as feasible beyond a "tipping point" of a 60% funding Sufficiency Ratio (a tipping point is a crisis in which the WSIB could not generate sufficient funds to pay workers' benefits within a reasonable time frame and by reasonable measures); and
- putting the WSIB on course to achieve a 90%–110% funding Sufficiency Ratio within 20 years.

In response to our concerns and to the recommendations of the report, the government passed Regulation 141/12 under the Act in June 2012. Effective January 1, 2013, it required the WSIB to ensure it meets the following funding Sufficiency Ratios by specified dates:

- 60% on or before December 31, 2017;
- 80% on or before December 31, 2022; and
- 100% on or before December 31, 2027.

The government also passed Ontario Regulation 338/13 in 2013. It came into force January 1, 2014, and changed the way the WSIB calculates the funding Sufficiency Ratio by changing the method used to value its assets and liabilities. Our Office concurred with this amendment.

The WSIB issues quarterly Sufficiency Reports and an audited Sufficiency Report to stakeholders annually. As of December 31, 2015, under Regulation 141/12 as amended by Regulation 338/13, the WSIB reported a Sufficiency Ratio of 77.9% (in 2014, the Sufficiency Ratio was 71.6%). This means the WSIB has already achieved its December 31, 2017 funding requirement.

The WSIB also submits an annual update of the Sufficiency Plan to the Ministry of Labour by June 30 of each year, in which it describes the measures taken to improve its funding Sufficiency Ratio. The most recent Plan was dated June 29, 2016, and was formally accepted by the Ministry of Labour on September 1, 2016.

The WSIB's operational and financial performance was strong in 2015, as illustrated in **Figure 9**, which provides a summary of the WSIB's operating results and unfunded liability compared to 2014.

The WSIB's continued strong operating performance in 2015 resulted from growth in premium revenues, improved return-to-work outcomes and better-than-expected investment returns (5.8% versus the target of 5.25%).

However, the WSIB's ability to maintain its current funding Sufficiency Ratio, achieve the 2022 and 2027 prescribed funding Sufficiency Ratios, and continue its strong financial performance remains subject to considerable uncertainty regarding future benefit costs, premium revenues and investment returns.

As a result of commitments by the government and the WSIB to address the unfunded liability and the progress the WSIB has made so far, we support the continued classification of the WSIB as a trust for the 2015/16 fiscal year and, therefore, the exclusion of the unfunded liability from the Province's liabilities. However, we will continue to monitor the WSIB's progress on meeting the required funding Sufficiency Ratios and re-evaluate our position as necessary.

Figure 9: Workplace Safety and Insurance Board Operating Results and Unfunded Liability, 2015 and 2014
Source of data: WSIB Financial Statements and WSIB Fourth Quarter 2015 Report to Stakeholders

	2015 ($ million)	2014 ($ million)
Revenue		
Premiums	4,684	4,504
Net investment income	1,199	1,927
	5,883	**6,431**
Expenses		
Benefit costs	3,760	2,623
Loss of Retirement Income Fund contributions	56	59
Administration and other expenses	406	358
Legislated obligations and commitments	263	276
Remeasurement of employee defined benefit plans	(45)	296
	4,440	**3,612**
Total Comprehensive Income	**1,443**	**2,819**
Less: Non-controlling Interests	(152)	(242)
Total Comprehensive Income Attributable to WSIB Stakeholders	**1,291**	**2,577**
Unfunded Liability	**6,599**	**7,890**

It should also be noted that on September 7, 2016, the WSIB provided the Standing Committee on Public Accounts with a status report on its unfunded liability in response to the recommendations pertaining to the WSIB in **Chapter 2** of our *2015 Annual Report*. Specifically, WSIB shared the following key results regarding the Sufficiency Ratio and the unfunded liability:

- As of June 30, 2016, the Sufficiency Ratio reached 82.3%;
- The unfunded liability as of September 7, 2016, stands at $5.6 billion, compared to the high of $14.2 billion reached in December 2011;

WSIB's current projections indicate a likely elimination of the unfunded liability by 2021, which is six years ahead of requirements.

10.0 Ontario Retirement Pension Plan (ORPP) Initiative

On August 5, 2016, the Ministry of Finance requested that our Office undertake a special assignment under Section 17 of the *Auditor General Act* to provide an attest opinion on the accuracy and completeness of the cost estimates for the Ontario Retirement Pension Plan (ORPP) initiative as presented in the summary of ORPP costs. Our Office was requested to report on the schedule of costs for the ORPP initiative for the period from October 1, 2013, to July 15, 2016.

The Province started exploring options for an Ontario supplemental pension plan in October 2013. In 2014, the Province announced plans to proceed with the development of a new mandatory pension plan called the ORPP. In November 2014, the government established the ORPP Implementation Secretariat (Secretariat) to initiate and oversee the policy, legislative and operational foundations of the ORPP. The Secretariat oversaw the establishment of the ORPP Administrative Corporation (Corporation) and undertook governance, plan design, communication and stakeholder engagement, investment strategy and delivery and operations foundational work. The Corporation was responsible for making the pension plan operational and for administering and investing the pension fund as trustee.

In June 2016, Canada's finance ministers met and agreed in principle to enhance the Canada Pension Plan. Following this agreement, the Government of Ontario stated that it would not proceed with establishing the ORPP.

The schedule of costs for the ORPP covers the costs incurred by the Corporation, Secretariat and other Ministry of Finance expenditures. The expenditures for the ORPP initiative were $55.4 million plus provisions for contingent expenditures of $15 million. The schedule was prepared, on an accrual basis, to present all costs associated with the ORPP initiative. Our Office expressed an unqualified audit opinion on the full cost schedule (see **Appendix**).

11.0 Reporting under *Fiscal Transparency and Accountability Act*

Under the *Fiscal Transparency and Accountability Act, 2004* (Act), the Minister of Finance (Minister) is required to release a number of fiscal reports, documents and indicators to the public. Accountability and transparency are enhanced by this enshrining in legislation of a coherent cycle for reporting on the state of Ontario's finances throughout the year.

Sections 5 through 10 of the Act deal with the various reporting requirements, including the deadlines the Minister must meet to release the information to the public:

- *Section 5:* requires the Minister to release a multi-year fiscal plan, as outlined in the Province's budget laid before the Assembly. The fiscal plan must be released to the public each

fiscal year. The Minister has released a three-year fiscal plan annually since the Act came into force.

- *Section 6:* requires the Minister to conduct a mid-year review of the fiscal plan, which must be released on or before November 15 each fiscal year. The Province refers to this review as the "Ontario Fall Economic Outlook and Fiscal Review"—otherwise known as the Ontario Fall Economic Statement. The mid-year review has been released on time or within two weeks of the legislated deadline.
- *Section 7:* requires the Minister to release in each year, on or before August 15 and on or before February 15, updated information about Ontario's revenues and expenses for the current fiscal year. The Province refers to these as its "First and Third Quarter Finances", which are scheduled for release on or before August 15 and on or before February 15, respectively. We noted that, while the Minister generally releases the Province's First Quarter Finances before the legislated deadline (August 15), the Third Quarter Finances have been released after the deadline (February 15). The last release of the Third Quarter Finances by the legislated deadline was on January 22, 2013, relating to the 2012/13 fiscal year. There was no release of the Third Quarter Finances for the 2013/14, 2014/15, and 2015/16 fiscal years. However, in respect of these fiscal years, the Minister of Finance notified the Legislative Assembly that the Third Quarter Finances would be included in the annual budgets, noting this would allow for the most complete and up-to-date picture of Ontario finances. For the 2014/15 fiscal year, the First Quarter Finances update was included in the 2014 Ontario Budget and as such a separate first quarter update was not released.
- *Section 9:* requires the Minister to release a long-range assessment of the Province's fiscal environment within two years after each provincial election. The Province refers to this assessment as Ontario's Long-Term Report on the Economy. For 2009 and 2013, Ontario's Long-Term Report on the Economy was released after the legislated deadline. In both cases, the Minister issued a statement to the Legislative Assembly saying the reports would be delayed. An explanation was provided for 2009 and 2013. Most recently, on June 10, 2016, the Minister notified the Legislative Assembly that the June 12, 2016, deadline for the current Long-Term Report would be delayed until later in the fiscal year, but did not explain why the information—a requirement under *Section 11* of the Act—was being released late. As at October 31, 2016, the Long-Term Report on the Economy had not been released.

While *Section 11* of the Act allows the Minister to delay the release of information by issuing a statement to the Legislative Assembly, it does not address how long afterward the Minister must release the information.

RECOMMENDATION 10

To ensure compliance with financial disclosure requirements under the *Fiscal Transparency and Accountability Act, 2004*, the Ministry of Finance should work with the Minister of Finance's office to ensure that:

- the Third Quarter Finances report is prepared and publicly released on a timely basis;
- when there are delays in issuing Ontario's Long-Term Report on the Economy and a letter is tabled to that effect, the letter includes the reasons for the delay; and
- delayed information is tabled as soon as it is available.

MINISTRY OF FINANCE RESPONSE

The Ministry of Finance will continue to ensure that financial disclosures are released on a timely basis and when they are not available, an explanation is provided in accordance with legislation.

12.0 Ongoing Accounting-Standards Matters

As noted previously, it is our view that PSAB standards are the most appropriate for the Province to use in preparing its consolidated financial statements. This ensures that information provided by the government about the surplus or the deficit is fair, consistent and comparable to data from previous years, allowing legislators and the public to assess the government's management of the public purse. It is worth noting that Ontario's provincial budget is also prepared on the same basis as its consolidated financial statements.

However, PSAB faces challenges in reaching a consensus among its various stakeholders, including financial statement preparers and auditors, on what accounting standards are most appropriate for the public sector.

We discuss three significant accounting issues (Financial Instruments, Rate-Regulated Accounting and Transfer Payments) that have posed a significant challenge to PSAB over the past few years. Their final accounting-standard determination will affect the way the Province accounts for these items, and it will have a significant impact on the Province's reported financial results.

12.1 Financial Instruments

Financial instruments include provincial debt, and derivatives such as currency swaps and foreign-exchange forward contracts. PSAB's project to develop a new standard for reporting financial instruments began in 2005, with a key issue being whether changes in the fair value of derivative contracts held by governments should be reflected in their financial statements and, in particular, whether such changes should affect a government's annual surplus or deficit.

In March 2011, PSAB approved a new public-sector accounting standard on financial instruments, effective for fiscal periods beginning on or after April 1, 2015. The new standard provides guidance on the treatment of government financial instruments, and is similar to comparable private-sector standards.

One of its main requirements is for certain financial instruments, including derivatives, to be recorded at fair value, with any unrealized gains or losses on these instruments recorded annually in a new financial statement of remeasurement gains and losses.

Some Canadian jurisdiction preparers, including Ontario, do not support the introduction of these fair-value remeasurements and the recognition of unrealized gains and losses. Ontario's view is that it uses derivatives solely to manage foreign currency and interest-rate risks related to its long-term-debt holdings, and that it has both the intention and ability to hold these derivatives until the debts associated with them mature.

Accordingly, remeasurement gains and losses on the derivatives and their underlying debt would offset each other over the total period that such derivatives are held, and therefore would have no real economic impact on the government.

The government argues that recording paper gains and losses each year would force the Province to inappropriately report the very volatility that the derivatives were acquired to avoid. This, in its view, would not reflect the economic substance of government financing transactions and would not provide the public with transparent information on government finances.

In response to governments' concerns, PSAB committed to reviewing the new financial instruments standard by December 2013. PSAB completed its review of *Section PS 2601, Foreign Currency Translation,* and *Section PS 3450, Financial Instruments,* and in February 2014 confirmed the soundness of the principles underlying the new standard.

PSAB deferred the effective date for these new standards to fiscal years beginning on or after April 1, 2016. In 2015, however, PSAB further extended the effective date for the new standard to April 1, 2019, for senior governments, to allow

further study of reporting options for these complex financial instruments.

We continue to recommend ongoing dialogue between our Office and the Office of the Provincial Controller to review areas of common concern as the PSAB reassesses the standard in preparation for implementing it on April 1, 2019.

12.2 Rate-Regulated Accounting

Rate-regulated accounting was developed to recognize the unique nature of entities, such as electric utilities, whose rates are regulated by an independent regulator. In general, it allows the deferral of revenue and expenses to future years. The regulator often allows the entity to recover certain current year costs from the ratepayer in future years, and these deferred costs are typically set up under rate-regulated accounting as assets on the entity's statement of financial position. Under normal accounting principles, these costs would be expensed in the year incurred. We have in recent years raised concerns about the appropriateness of recognizing such assets and liabilities in the province's consolidated financial statements. The absence of rate-regulated accounting would have considerable impact on those entities that follow it.

Rate-regulated accounting is used by three of the Province's government-controlled business enterprises, Ontario Power Generation Inc. (OPG), Hydro One, and Brampton Hydro whose rates to customers are approved by the government-established regulator, the Ontario Energy Board. Rate-regulated accounting treatment is currently allowable under Canadian generally accepted accounting principles. However, we question whether rate-regulated assets should be considered as bona fide assets in the government's consolidated financial statements.

As noted above, rate-regulated accounting provisions outline the need for an independent regulatory body to set rates. We note that, since the government controls both the regulator and the major regulated entities, it has significant influence on which costs Hydro One and OPG will recognize in a given year. This could ultimately affect both electricity rates and the annual deficit or surplus reported by the government.

In our previous annual reports, we outlined that the era of rate-regulated accounting appeared to be ending for jurisdictions like Canada as they were converting to International Financial Reporting Standards (IFRS), developed by the International Accounting Standards Board (IASB), in 2012. Our comments were based on the fact that, in January 2012, Canada's Accounting Standards Board (AcSB) reaffirmed that all government business enterprises should prepare their financial statements in accordance with IFRS for fiscal years beginning on or after January 1, 2012. At that time, IFRS standards did not include accounting provisions that addressed rate-regulated activities and so, by default, IFRS standards did not permit rate-regulated accounting.

However, the rate-regulated accounting landscape has continued to evolve since then. Efforts to harmonize U.S. generally accepted accounting policies (U.S. GAAP) and IFRS were in place as Canada converted to IFRS in 2012. At that time, U.S. GAAP allowed for, and continues to allow for, rate-regulated accounting. The appropriateness of rate-regulated accounting has been discussed as part of the efforts to harmonize U.S. GAAP and IFRS. As these discussions were taking place, Canada's AcSB granted a one-year extension in March 2012 to the mandatory IFRS changeover date for entities with qualifying rate-regulated activities. Multiple one-year extensions to defer adoption of IFRS by these entities followed over the next few years.

An interim IFRS standard was issued in January 2014 as an attempt to ease the adoption of IFRS for rate-regulated entities by allowing them to continue to apply existing policies for their deferred rate-regulated balances upon adoption of IFRS starting on January 1, 2015. Essentially, the interim standard provides a first-time adopter of IFRS with relief from having to derecognize their rate-regulated assets and liabilities until the comprehensive review

on accounting for such assets and liabilities is completed by the IASB. The result of this review and the determination of whether rate-regulated accounting will be allowed on an ongoing basis, as opposed to an interim basis, is uncertain at this time.

Rate-regulated accounting has a significant impact on the government's financial statements. For example, OPG recognized $5.7 billion in net rate-regulated assets as of March 31, 2016. Future reporting under IFRS that does not accommodate rate-regulated accounting would increase the volatility of Hydro One and OPG's annual operating results. This in turn would lead to volatility in the Province's annual deficit or surplus and may impact the government's revenue and spending decisions.

We will continue to monitor developments impacting the use of rate-regulated accounting going forward to assess its impact on the Province's consolidated financial statements.

12.3 Transfer Payments

PSAB's Government Transfers project began a number of years ago to address several accounting issues related to monetary and capital asset transfers from one level of government to a recipient, including the following:

- appropriately accounting for multi-year funding provided by one government to another;
- clarifying the authorization needed for transfers to be recognized by both the government making the transfer, and the one receiving it;
- clarifying the degree to which stipulations imposed by a transferring government affect the timing of transfer recognition in the accounts of the recipient governments; and
- appropriately accounting for transfers that are to be used to acquire or construct tangible capital assets.

After substantial discussion and the issuing of several documents for comment, PSAB approved a new standard on government transfers in December 2010, effective for fiscal years beginning on or after April 1, 2012.

One of the most difficult areas PSAB had to address in developing the standard was how recipients should account for multi-year transfers. If the federal government makes a lump-sum transfer near the end of a fiscal year to a province to fund services over several years, the question arises as to whether the province should immediately recognize the full amount of the grant as revenue, or recognize the revenue spread out over the years it provides the federally funded services.

A similar issue arises with respect to capital transfers from the province to entities such as school boards and hospitals. A number of stakeholders held the view that capital transfers should be recognized as revenue when the recipient government incurs the expenditures making it eligible to receive the grant. However, other stakeholders held that such transfers should be brought into revenue over time as the tangible capital asset acquired or constructed with the transferred funds is used to provide public services.

The new standard generally recommends that recipients should recognize a government transfer as revenue when it has been authorized and the recipient has met all eligibility criteria. However, this requirement does not apply when the transferring government creates a liability for the recipient government by imposing stipulations on the use of the transfer, or specifies actions the recipient needs to take to keep the transfer.

The standard also specifies that actions and communications by the recipient that restrict the use of transferred funds for a specific purpose can create a liability. To meet PSAB's liability definition, there must be no discretion to avoid it, there must be a future outflow of economic resources to settle it, and it must be the result of past transactions and events. Whether the facts and circumstances surrounding a particular transfer support the recognition of a liability is a matter of professional judgment. If a transfer is determined to create a liability for the recipient government, the transfer is deferred and recognized as revenue as the liability is settled over time.

As we highlighted in our *2015 Annual Report*, rather than enhancing consistency and comparability in accounting for government transfers, the new standard appears to have created confusion. Its requirements are broad and open to interpretation, resulting in significant differences in its application. This is a concern, because transfers are usually a significant government activity and can have a great impact on reported results. In the 2015/16 fiscal year, Ontario recorded transfer-payment expenses of approximately $54 billion and transfer revenue from the federal government of around $22.9 billion.

Many stakeholders had asked PSAB to consider amending the government transfers standard because of inconsistencies in interpretation and application. PSAB took the view that more empirical evidence is needed before it will consider amending the standard.

One significant area where consensus has been difficult to reach is accounting for transfers received to fund the acquisition or construction of tangible capital assets. Depending on the circumstances, such transfers might be recognized as revenue when received, when the asset has been acquired or constructed, or over the service life of the asset.

While we acknowledge the controversy over this new standard, we believe that it supports the initial accounting of government transfers and external contributions as deferred capital contributions, with both being recorded as revenue over the useful life of the related tangible capital assets based on transfer stipulations and recipient actions and communications. As such, we agreed with $6.9 billion in deferred capital contributions being recorded in 2015/16 in the Province's March 31, 2016, consolidated financial statements ($6.3 billion in 2014/15).

PSAB carried out a post-implementation review of *PS 3410, Government Transfers*, because it was aware of different interpretations and applications of the standard. PSAB hoped this post-implementation review will help it assess implementation challenges encountered by stakeholders, and the nature, extent and cause of any ongoing issues. PSAB noted that it will use responses to the review, along with other procedures, to determine next steps in dealing with the interpretation and application of the standard.

In September 2015, PSAB reported that it had considered the preliminary results of the post-implementation review of *PS 3410, Government Transfers*. PSAB also discussed the options for next steps and requested staff to prepare an options paper for its consideration at a meeting scheduled for December 2015.

PSAB approved a feedback statement on the post-implementation review of *PS 3410, Government Transfers* in April 2016. The findings of the post-implementation review confirmed the primary area of concern is the accounting for capital transfers by recipient. PSAB noted the interpretation of the standard varied between and within preparers and auditors. Both qualified and unqualified audit opinions were issued on financial statements reporting similar transactions and following similar accounting. This does not serve the public interest or meet users' needs. PSAB said it would explore whether an authoritative accounting guideline would help clarify interpretations of the standard to resolve the different interpretation.

In August 2016, PSAB released a commentary in PSAB Matters concluding "status quo" for *PS 3410, Government Transfers* standard. In its commentary, PSAB noted that it had spent nine years of consultation with constituents when they were developing the standard. Flexibility was added to the standard to allow deferred capital contribution accounting under PSAB standards by referencing to the terms of each transfer agreement alone or, in addition to a recipient's own actions and communications, to drive the accounting treatment. PSAB noted that both scenarios require that the liability definition be met, taking into account the requirements of *Section PS 3200, Liabilities*.

The commentary noted that when *Section PS 3410* was approved, it recognized that there could be inconsistency in recipient accounting for capital transfers. However, PSAB noted that since

the standard was written with flexibility in mind, eliminating flexibility through a guideline could result in overriding the standard. PSAB concluded that the standard is sufficient on its own and it would not be issuing a guideline. PSAB noted it will only revisit the standard if there is a new potential development such as a new conceptual framework.

Based on the PSAB commentary, we again conclude that Ontario's accounting for deferred capital contribution is consistent with *PS 3410, Government Transfers*.

13.0 Public Sector Accounting Board Initiatives

This section outlines some additional items that PSAB has been studying over the past year that might affect the preparation of the Province's consolidated financial statements in the future.

13.1 Concepts Underlying Financial Performance

PSAB's existing conceptual framework is a set of interrelated objectives and fundamental principles that support the development of consistent accounting standards. Its purpose is to instill discipline into the standard-setting process to ensure that accounting standards are developed in an objective, credible and consistent manner that serves the public interest.

In 2011, PSAB formed the Conceptual Framework Task Force in response to concerns raised by several governments regarding current and proposed standards, which they contend cause volatility in reported results and distort budget-to actual comparisons. The task force's objective was to review the appropriateness of the concepts and principles in the existing conceptual framework for the public sector.

The task force's first step was to seek input from stakeholders on the building blocks of the conceptual framework; these will form the basis for evaluating the existing concepts underlying the measurement of financial performance. To this end, the task force has issued two consultation papers: *Characteristics of Public Sector Entities and Measuring Financial Performance in Public Sector Financial Statements*.

In March 2015, the task force issued a third consultation paper that proposed a new reporting model and draft principles on public-sector characteristics, financial statement objectives, qualitative characteristics, elements, recognition, measurement and presentation. The comment period ended in August 2015.

The task force is currently developing a Statement of Principles that will take into account input received from the three Consultation Papers and will propose a revised conceptual framework and reporting model for public-sector entities. PSAB expects to approve the Statement of Principles in 2017.

13.2 Asset Retirement Obligations

The objective of this project is to develop a standard that addresses the reporting of legal obligations associated with the retirement of long-lived tangible capital assets currently in productive use. For example, there may be obligations associated with decommissioning an electricity generating facility.

PSAB issued a statement of principles in August 2014 that proposes a new section on retirement obligations associated with tangible capital assets controlled by a public-sector entity. The main features of this statement of principles are:

- A retirement obligation should be recognized when there is a legal, constructive or equitable obligation to incur retirement costs in relation to a tangible capital asset.
- Upon initial recognition, the entity would increase the carrying amount of the related tangible capital asset by the same amount as the liability. Therefore, the initial recognition of an asset retirement obligation will increase net debt reported by a public-sector entity.

- The estimate of a liability for retirement obligation should include costs directly attributable to retirement activities, including post-retirement operation, maintenance and monitoring.
- A present-value technique is often the best method with which to estimate the liability.
- The carrying amount of the liability for a retirement obligation should be reviewed at each financial reporting date.
- Subsequent remeasurement of the liability can result in either a change in the carrying amount of the related tangible capital asset or an expense.

PSAB accepted feedback on the proposals until September 2014. Respondents were in general agreement with the key proposals. The next step in the project is an exposure draft to be issued in the first quarter of 2017.

13.3 Revenue

Two major sources of government revenue—government transfers and tax revenue—are addressed in the sections *PS 3410 Government Transfers* and *PS 3510 Tax Revenues* of the *CPA Canada Public Sector Accounting Handbook* (Handbook). However, the Handbook does not specifically address other revenues.

In September 2011, PSAB approved an amended project proposal on revenues to address the limited guidance in the Handbook on revenues that are common in the public sector. PSAB did not initiate the project to review the existing revenue standards; rather, it aimed to put in place overarching guidance to address questions about when revenues are recognized, and how they are measured and presented in the financial statements.

In August 2013, PSAB issued a Statement of Principles containing proposals that will affect the reporting of a broad range of revenues. The purpose of the project and Statement of Principles is to create a new Section on revenues that would apply to public-sector entities that follow the Handbook.

The Statement of Principles focuses on two main areas of revenue: exchange transactions and unilateral (non-exchange) transactions.

It also:

- notes the presence of performance obligations for the public-sector entity as the distinguishing feature of an exchange transaction;
- defines performance obligations as enforceable promises to provide goods or services;
- recognizes that revenue from an exchange transaction constitutes the public-sector entity's meeting of a performance obligation;
- recognizes unilateral revenues when there is the authority and a past event that gives rise to a claim of economic resources; and
- allows that revenue is not reduced when collectability is uncertain; instead, a corresponding allowance for doubtful accounts is established for the associated receivable.

The next step in the project is for an exposure draft to be issued in the first quarter of 2017.

13.4 Employment Benefits

In December 2014, PSAB approved an Employment Benefits project to improve the existing Handbook sections by taking into account changes in the related accounting concepts and new types of pension plans that were developed since the existing sections were issued decades ago. The project aims to review the existing sections, *PS 3250 Retirement Benefits* and *PS 3255 Postemployment Benefits, Compensated Absences and Termination Benefits*.

The first phase of the project will focus on measurement issues such as the deferral of experience gains and losses, and discount rates. The second phase will address non-traditional pension plans such as shared risk plans, as well as other important topics such as multi-employer defined benefit plans and vested sick-leave benefits.

The first step in the process will be an invitation to comment on the deferral of experience gains and losses to be issued before the end of 2016. A separate invitation to comment on discount rates is planned for 2017.

13.5 Public-Private Partnerships

Public-private partnerships (also referred to as P3s) are increasingly common in the public sector as a way to deliver large public infrastructure projects. In December 2015, PSAB approved a project to develop a standard that addresses recognition, measurement and disclosure matters and provides guidance on how to account for public-private partnerships. PSAB expects to issue a statement of principles in the first quarter of 2017.

14.0 Statutory Matters

Under section 12 of the *Auditor General Act*, the Auditor General is required to report on any Special Warrants and Treasury Board Orders issued during the year. In addition, section 91 of the *Legislative Assembly Act* requires that the Auditor General report on any transfers of money between items within the same vote in the Estimates of the Office of the Assembly.

14.1 Legislative Approval of Expenditures

Shortly after presenting its budget, the government tables detailed Expenditure Estimates in the Legislative Assembly outlining, on a program-by-program basis, each ministry's planned spending. The Standing Committee on Estimates (Committee) reviews selected ministry estimates and presents a report on this review to the Legislature. Orders for Concurrence for each of the estimates selected by the Committee, following a report by the Committee, are debated in the Legislature for a maximum of two hours before being voted on. The estimates of those ministries that are not selected are deemed to be passed by the Committee, reported to the Legislature, and approved by the Legislature.

After the Orders for Concurrence are approved, the Legislature still needs to provide its final approval for legal spending authority by approving a Supply Act, which stipulates the amounts that can be spent by ministries and legislative offices, as detailed in the estimates. Once the Supply Act is approved, the expenditures it authorizes are considered to be Voted Appropriations. The *Supply Act, 2016*, which pertained to the fiscal year ended March 31, 2016, received Royal Assent on March 24, 2016.

The *Supply Act* does not receive Royal Assent until after the start of the fiscal year—and sometimes even after the related fiscal year is over—so the government usually requires interim spending authority prior to its passage. For the 2015/16 fiscal year, the Legislature passed two acts allowing interim appropriations—the *Interim Appropriation for 2015-2016 Act, 2015* (Interim Act) and the *Supplementary Interim Appropriation for 2015-2016 Act, 2015* (Supplementary Act). These two acts received Royal Assent on June 4, 2015, and December 10, 2015, respectively, and authorized the government to incur up to $124.1 billion in public service expenditures, $4.9 billion in investments, and $219.5 million in legislative office expenditures. Both acts were made effective as of April 1, 2015, and provided the government with sufficient authority to allow it to incur expenditures from April 1, 2015, to when the *Supply Act, 2016*, received Royal Assent on March 24, 2016.

Because the legal spending authority under the Interim Act and the Supplementary Act was intended to be temporary, both were repealed when the *Supply Act, 2016*, received Royal Assent. The *Supply Act, 2016*, also increased total authorized expenditures of the legislative offices from $219.5 million to $219.6 million.

14.2 Special Warrants

If the Legislature is not in session, section 1.0.7 of the *Financial Administration Act* allows for the issuance of Special Warrants authorizing the incurring

of expenditures for which there is no appropriation by the Legislature or for which the appropriation is insufficient. Special Warrants are authorized by Orders-in-Council and approved by the Lieutenant Governor on the recommendation of the government.

No Special Warrants were issued for the fiscal year ended March 31, 2016.

14.3 Treasury Board Orders

Section 1.0.8 of the *Financial Administration Act* allows the Treasury Board to make an order authorizing expenditures to supplement the amount of any voted appropriation that is expected to be insufficient to carry out the purpose for which it was made. The order may be made only if the amount of the increase is offset by a corresponding reduction of expenditures to be incurred from other voted appropriations not fully spent in the fiscal year. The order may be made at any time before the government closes the books for the fiscal year. The government considers the books to be closed when any final adjustments arising from our audit have been made and the Public Accounts have been published and tabled in the Legislature.

Even though the *Treasury Board Act, 1991* was repealed and re-enacted within the *Financial Administration Act* in December 2009, subsection 5(4) of the repealed act was retained. This provision allows the Treasury Board to delegate any of its duties or functions to any member of the Executive Council or to any public servant employed under the *Public Service of Ontario Act, 2006*. Such delegations continue to be in effect until replaced by a new delegation. Since 2006, the Treasury Board has delegated its authority for issuing Treasury Board Orders to ministers to make transfers between programs within their ministries, and to the Chair of the Treasury Board for making program transfers between ministries and making supplementary appropriations from contingency funds. Supplementary appropriations are Treasury Board Orders in which the amount of an appropriation is offset by a reduction to the amount available under the government's centrally controlled contingency fund.

Figure 10 summarizes the total value of Treasury Board Orders issued for the past five fiscal years.

Figure 11 summarizes Treasury Board Orders for the fiscal year ended March 31, 2016, by month of issue.

According to the Standing Orders of the Legislative Assembly, Treasury Board Orders are to be printed in *The Ontario Gazette*, together with explanatory information. Orders issued for the 2015/16 fiscal year are expected to be published in *The Ontario Gazette* in December 2016. A detailed listing of 2015/16 Treasury Board Orders, showing the amounts authorized and expended, is included in **Exhibit 4** of this report.

Figure 10: Total Value of Treasury Board Orders, 2011/12–2015/16 ($ million)

Source of data: Treasury Board

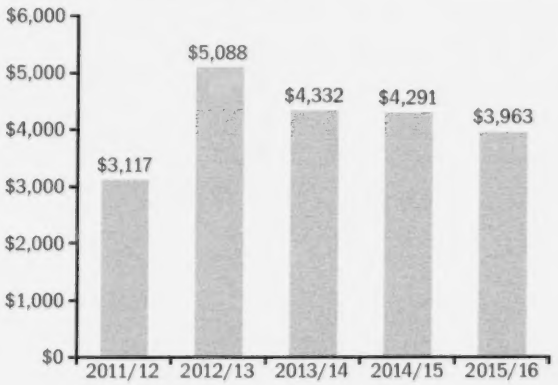


Figure 11: Total Value of Treasury Board Orders by Month Relating to the 2015/16 Fiscal Year

Source of data: Treasury Board

Month of Issue	#	Authorized ($ million)
April 2015–February 2016	67	2,093
March 2016	29	1,444
April 2016	7	115
August 2016	7	310
Total	**110**	**3,963**

14.4 Transfers Authorized by the Board of Internal Economy

When the Board of Internal Economy authorizes the transfer of money from one item of the Estimates of the Office of the Assembly to another item within the same vote, section 91 of the *Legislative Assembly Act* requires that we make special mention of the transfer(s) in our Annual Report.

Accordingly, **Figure 12** shows the transfers made within Vote 202 with respect to the 2015/16 Estimates.

Figure 12: Authorized Transfers Relating to the Office of the Assembly, 2015/16 Fiscal Year

Source of data: Board of Internal Economy

From:		$
Item 5	Office of the French Language Services Commissioner	(28,800)
To:		
Item 1	Environmental Commissioner	28,800

14.5 Uncollectible Accounts

Under section 5 of the *Financial Administration Act*, the Lieutenant Governor in Council, on the recommendation of the Minister of Finance, may authorize an Order-in-Council to delete from the accounts any amounts due to the Crown that are the subject of a settlement or deemed uncollectible. The amounts deleted from the accounts during any fiscal year are to be reported in the Public Accounts.

In the 2015/16 fiscal year, receivables of $396 million due to the Crown from individuals and non-government organizations were written off. (The comparable amount in 2014/15 was $354.5 million.) The write-offs in the 2015/16 fiscal year related to the following:

- $124.2 million for uncollectible retail sales tax ($107.4 million in 2014/15);
- $98.9 million for uncollectible corporate tax ($101.1 million in 2014/15);
- $65.3 million for uncollectible receivables under the Ontario Disability Support Program ($11.8 million in 2014/15);
- $50.9 million for uncollectible receivables under the Student Support Program ($59.7 million in 2014/15);
- $20.3 million for uncollectible employer health tax ($15.4 million in 2014/2015); and
- $36.4 million for other tax and non-tax receivables ($59.1 million in 2014/15).

Volume 2 of the 2015/16 Public Accounts summarizes the writeoffs by ministry. Under the accounting policies followed in the preparation of the Province's consolidated financial statements, a provision for doubtful accounts is recorded against accounts receivable balances. Most of the writeoffs had already been expensed in the government's consolidated financial statements. However, the actual writeoff in the accounts required Order-in-Council approval.

Appendix: Audited Schedule of Costs for the Ontario Retirement Pension Plan Initiative Prepared by Ministry of Finance

Source of data: Schedule prepared by Ministry of Finance; audit opinion prepared by the Office of the Auditor General of Ontario

Responsibility for Financial Reporting

The accompanying Schedule of Costs for the Ontario Retirement Pension Plan initiative (the "Schedule") has been prepared in accordance with the basis of accounting described in Note 2 to the Schedule. The preparation, presentation and integrity of the Schedule are the responsibility of management. The Schedule includes amounts based on best estimates and judgments. Management has determined such amounts on a reasonable basis in order to ensure that the Schedule is presented properly within reasonable limits of materiality in light of the information available up to September 29, 2016.

Management maintains a system of internal controls designed to provide reasonable assurance that the assets are safeguarded and that reliable financial information is available on a timely basis. The system includes formal policies and procedures and an organizational structure that provides for appropriate delegation of authority and segregation of responsibilities. An internal audit function independently evaluates the effectiveness of these internal controls on an ongoing basis and reports its findings to the Ministry.

The Schedule has been audited by the Office of the Auditor General of Ontario. The Auditor's responsibility is to express an opinion on whether the Schedule is prepared, in all material respects, to present on an accrual basis all costs associated with the Ontario Retirement Pension Plan initiative in accordance with the basis of accounting described in Note 2 to the Schedule. The Independent Auditor's Report outlines the scope of the Auditor's examination and opinion.

On behalf of management:

Scott Thompson
Deputy Minister of Finance

Office of the Auditor General of Ontario
Bureau du vérificateur général de l'Ontario

Independent Auditor's Report

To the Minister of Finance

I have audited the accompanying Schedule of Costs for the Ontario Retirement Pension Plan initiative (the "Schedule") for the period from October 1, 2013 to July 15, 2016. The Schedule has been prepared by management based on the financial reporting provisions defined in the basis of accounting section below.

Management's Responsibility for the Schedule

The Ministry of Finance is responsible for the preparation of the Schedule in accordance with the basis of accounting defined in Note 2 to the Schedule and for such internal control as management determines is necessary to enable the preparation of the Schedule that is free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

My responsibility is to express an opinion on the Schedule based on my audit. I conducted my audit in accordance with Canadian generally accepted auditing standards. Those standards require that I comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the Schedule is free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the Schedule. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the Schedule, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation of the Schedule in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the Schedule.

I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my audit opinion.

Opinion

In my opinion, the Schedule of Costs for the Ontario Retirement Pension Plan initiative, for the period from October 1, 2013 to July 15, 2016, is prepared in all material respects, in accordance with the financial reporting provisions defined in the basis of accounting section below.

Basis of Accounting and Restriction on Use

Without modifying my opinion, I draw attention to Note 2 of the Schedule which describes the basis of accounting for Ontario Retirement Pension Plan costs. The Schedule was prepared to assist the Ministry of Finance in disclosing costs related to the Ontario Retirement Pension Plan initiative.

Toronto, Ontario
September 29, 2016

Bonnie Lysyk, MBA, CPA, CA, LPA
Auditor General

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Schedule of Costs for the Ontario Retirement Pension Plan (ORPP) initiative

For the Period from October 1, 2013 to July 15, 2016 (in thousands of dollars)

Ontario Retirement Pension Plan Administration Corporation (ORPPAC) Expenditures (Note 3)		
Consulting and Professional Services	$	18,357
Salaries and Employee Benefits		5,827
Legal Services		3,260
Other		945
Interest		93
		28,482
Less: Interest income		(87)
		28,395
Ministry of Finance Expenditures		
Ontario Retirement Pension Plan Implementation Secretariat (ORPPIS)		
Consulting and Professional Services		5,422
Salaries and Employee Benefits		4,693
Legal Services		1,500
Other		827
		12,442
Other Ministry of Finance Expenditures (excluding ORPPIS)		
Advertising Costs		8,208
Salaries and Employee Benefits		5,035
Other		539
Legal Services		396
Consulting and Professional Services		383
		14,561
Expenditures for the ORPP initiative before the undernoted		**55,398**
Provision for Contingent Expenses (Note 4)		15,000
Total Costs for the ORPP Initiative	$	**70,398**

Approved by:

Hon. Charles Sousa
Minister of Finance

Scott Thompson
Deputy Minister of Finance

Notes to the Schedule of Costs for the Ontario Retirement Pension Plan (ORPP) Initiative

1. **Background** – In October 2013, the Province began to explore options for an Ontario supplemental pension plan. On May 1, 2014, the Province announced that it was proceeding with the development of a new mandatory pension plan called Ontario Retirement Pension Plan. In November 2014, the government established the ORPP Implementation Secretariat (ORPPIS) to oversee the policy, legislative, governance and operational foundations of the ORPP. In November 2015, the government established an agency responsible for delivering the ORPP; the agency was named the ORPP Administration Corporation (ORPPAC). On June 20, 2016, Canada's finance ministers met and agreed in principle to enhance the Canada Pension Plan. Following this agreement in principle, the Province stated that it would not proceed with establishing the ORPP.
2. **Basis of Accounting** – The Schedule was prepared to present on an accrual basis all costs associated with the Ontario Retirement Pension Plan Initiative. The Schedule of Costs for the Ontario Retirement Pension Plan initiative shows costs incurred by ORPPAC and various other divisions at the Ministry of Finance.
3. **Ontario Retirement Pension Plan Administration Corporation Expenditures** – As of July 15, 2016, the Province had provided $31M in loans to ORPPAC to cover the ORPP start-up and operating costs. In September 2016, the government approved a remission order to forgive the loan and ORPPAC has returned $2.6M to the government from its bank account as surplus funds.
4. **Provision for Contingent Expenses** – The provision for contingent expenses includes the ORPPAC office space lease ($12 M) and other potential vendor and employee costs. The majority of this expense was associated with the office space lease. The Ministry of Infrastructure and Infrastructure Ontario is in the process of transferring the office space lease to the General Real Estate Portfolio of Infrastructure Ontario.

Chapter 3

Reports on Value-for-Money Audits

Our value-for-money (VFM) audits examine how well government ministries, organizations in the broader public sector, agencies of the Crown and Crown-controlled corporations manage their programs and activities. These audits are conducted under subsection 12(2) of the *Auditor General Act*, which requires that the Office report on any cases where we have found money spent without due regard for economy and efficiency, or where appropriate procedures were not in place to measure and report on the effectiveness of service delivery. Where relevant, such audits also include compliance issues. In essence, VFM audits delve into the underlying operations of the ministry program or organization being audited to assess both their cost-effectiveness and the level of service they deliver to the public. This chapter contains the conclusions, observations and recommendations for the VFM audits conducted in the past audit year.

The ministry programs and activities and the organizations in the broader public sector audited this year were selected by the Office's senior management on the basis of such criteria as the financial impact of a program or organization, its significance to the Legislative Assembly, related issues of public sensitivity and safety, and the results of past audits and related follow-up work.

We plan, perform and report on our value-for-money work in accordance with the professional standards for assurance engagements established by the Chartered Professional Accountants of Canada (formerly the Canadian Institute of Chartered Accountants), which encompass value-for-money and compliance work. These standards involve conducting the tests and other procedures that we consider necessary, including obtaining advice from external experts when appropriate.

Before beginning an audit, our staff conduct in-depth research into the area to be audited, and meet with representatives of the auditee to discuss the focus of the audit, including our audit objectives and criteria. During the audit, staff maintain an ongoing dialogue with the auditee to review the progress of the audit and ensure open communications. At the conclusion of the audit fieldwork, significant issues are discussed with the auditee and a draft audit report is prepared. Senior audit staff then meet with senior management from the auditee to discuss the draft report and the management responses to our recommendations. In the case of organizations in the broader public sector, discussions are also held with senior management of the funding ministry.

Once the content and responses for each VFM audit report are finalized, the VFM audit reports are incorporated as sections of this chapter of the Annual Report.

Ministry of Children and Youth Services

Child and Youth Mental Health

1.0 Summary

The Ministry of Children and Youth Services (Ministry) provides funding for community-based mental health services in Ontario—such as counselling and therapy, intensive treatment, specialized consultation and assessment, and crisis support—to children and youth (from birth to 18 years of age), and their families, who are experiencing or at risk of experiencing mental health problems, illnesses or disorders such as depression, anxiety, and attention deficit/hyperactivity disorders.

In 2015/16, the Ministry provided $438 million in transfer payments through its Child and Youth Mental Health (CYMH) program to more than 400 service providers, including agencies that primarily deliver child and youth mental health services and multi-service agencies that deliver a number of other Ministry-funded programs. These agencies reported over 120,000 registered clients.

In our audit this year we noted that many of the issues we highlighted in our 2003 audit of the CYMH program remain significant concerns. Specifically, we found that the Ministry still does not monitor and effectively administer this program to ensure that children and youth in need of mental health services are provided with timely, appropriate and effective mental health services, and to ensure that mental health services are delivered efficiently. While the Ministry has established program delivery requirements, it does not monitor whether agencies comply with these requirements, and its requirements are not always clear, leading to inconsistencies in service delivery across the agencies.

Consistent with our findings in our 2003 audit of community-based child and youth mental health services, the Ministry continues to primarily fund agencies based on historical spending instead of the current mental health needs of the children and youth they serve. We also found that the agencies' cost per client served varies significantly and could be in some respects indicative of funding inequity between agencies, but the Ministry has not assessed these variances to determine their reasonableness. Further, as we noted in our 2003 audit, the Ministry does not measure individual agency performance against targets, and does not effectively monitor client outcomes or overall program performance against measurable and meaningful targets.

Hospital emergency room visits by children and youth and their in-patient hospitalizations for mental health problems have increased more than 50% since 2008/09. Although this trend signals a growing problem, the Ministry has not analyzed the reasons for the increase.

In our audit this year we also found that the four agencies we visited do not always comply with

Ministry requirements for the delivery of services. Also, none of these agencies effectively monitor the outcomes of children and youth to help ensure that they are provided with timely, appropriate, and effective mental health services based on their assessed needs.

The following are some of our specific concerns about the delivery of mental health services by agencies:

- **Agencies did not always help in the transition of discharged children and youth to other service providers putting treatment gains already achieved at risk.** None of the four agencies we visited had policies to guide the actions of its staff when discharging clients that require transition to another service provider. Managing transitions is important to maintain continuity of service for clients and minimize disruption to the treatment gains they have already achieved. At one agency, we found cases where clients were discharged to the care of a Children's Aid Society while still requiring service, but were not provided any help to transition to another mental health service provider. At another agency, 50% of the discharged files we reviewed included a recommendation by the agency to transition to another service provider. However, the agency did not work with the service provider it recommended to facilitate the transition, as expected by the Ministry.
- **The mental health needs of children and youth are not assessed consistently, increasing the risk of inconsistent service decisions.** Agencies are required to assess the needs of children and youth using standardized, evidence-informed assessment tools. Standardized, evidence-informed assessment tools are intended to enhance the consistency and objectivity of assessments. However, we found such tools were either not completed, or it was not evident that results from these assessment tools were used to help develop initial service plans, in about 50% to 100% of the cases we reviewed at three of the four agencies we visited. In addition, at each of the four agencies visited, we also found that in 20% to 100% of the cases we reviewed, the agencies either did not complete evidence-informed assessment tools, or it was not evident that they used the results of these assessment tools to periodically assess the mental health services provided to children and youth to help update service plans, and to inform decisions to discharge children and youth from service.
- **Absent Ministry direction, timelines for reviewing service plans varied between agencies, increasing the risk of delaying children and youth from receiving services most appropriate to their needs.** Although the Ministry requires agencies to regularly review the service plan of each client, it does not prescribe timelines for doing so. We found that the agencies we visited had different timelines for reviewing service plans, ranging from three to six months. As well, at two of the four agencies we visited, we found that in some cases the agencies either did not follow their own timelines or did not review service plans at all as required by the Ministry.
- **There is a risk that the mental health of children and youth can deteriorate while waiting for service, but little is done to monitor wait time trends and their impact.** The agencies we visited do not currently monitor trends in wait times to assess their reasonableness and to identify issues that may require follow-up or corrective action. In addition, although most of the agency caseworkers we spoke to told us that the mental health of at least some, and as many as half, of the children they work with deteriorated while waiting for service, none of the agencies we visited track the impact of wait times on the mental health problems of children and youth waiting for service. We noted that average wait times for some services in

2015/16 exceeded six months at three of the four agencies we visited.

- **Agencies do not monitor and assess client outcomes to determine if clients benefited from the services they received.** The agencies we visited did not consistently determine and record whether clients achieved a positive outcome at the end of their mental health service, as required by the Ministry. As well, all four agencies we visited did not monitor client outcomes to assess their reasonableness and to identify trends that may require follow-up and/or corrective action to help ensure children and youth receive appropriate and effective mental health services.
- **A lack of supervision of key decisions by caseworkers could increase the risk of negative consequences for children and youth.** Neither the Ministry nor the four agencies we visited require supervisors in agencies to review and approve key decisions and documents completed by agency caseworkers.

The following are some of our specific concerns about the Ministry's administration of the Child and Youth Mental Health program:

- **Ministry does not fund agencies based on the current needs of children and youth served.** Similar to when we last audited the program in 2003, the Ministry continues to allocate the vast majority of funding to agencies based on historical allocations instead of the mental health needs of the children and youth they serve. In addition, we found that the Ministry's plan to implement a new needs-based funding model by 2016 has been delayed, and a timeline for its implementation has yet to be determined.
- **Ministry does not provide clear program requirements to agencies and there is insufficient Ministry oversight of the services delivered by agencies to help reduce the risk of inconsistent service delivery.** Although the Ministry has established minimum expectations for the delivery of services, it has not implemented a process to monitor whether agencies comply with these requirements, and we found many cases where they did not. In addition, we found that the Ministry's expectations are in some respects general, increasing the risk that they will be interpreted and applied inconsistently by agencies. For example, the Ministry requires that clients on waitlists for service be informed at regular intervals about their status, but it has not defined what a regular interval should be. As a result, we found that just one of the agencies we visited had a policy and time frame to update clients about their status while on a waitlist.
- **Ministry does not assess the reasonableness of significant differences between agencies in costs per client and client caseloads per worker to help ensure agencies are effective and efficient.** The Ministry collects information from agencies on the services they provide, their staffing levels and financial data. However, the Ministry does not review this information to identify and assess whether significant differences between agencies in costs per client served and caseloads per agency worker are reasonable. We analyzed this data for 2015/16 for all agencies and found significant variances that warrant Ministry follow-up. For example, we looked at the costs for providing five mental health services, and found that approximately one in five agencies reported average costs per client that were at least 50% higher than the provincial average. As well, between 16% and 24% of agencies reported average caseloads per worker that were at least 50% larger than the provincial average for these same services.
- **Ministry does not monitor the performance of the program or agencies to facilitate corrective action where needed, and does not collect data on all current Ministry performance indicators.** Although the Ministry introduced 13 new performance indicators

in the 2014/15 fiscal year, it is still not collecting data on three of them, and has not set targets for any of the indicators against which to measure results. In addition, even though agencies have been reporting their data on the indicators, the Ministry has not analyzed the results to identify if follow-up and corrective action is needed at specific agencies. Our analysis of the Ministry's data identified variances that should be followed up by the Ministry. For example, nearly one in five agencies reported an average wait time for intensive treatment services that was at least 50% longer than the provincial average of 89 days, and nearly one-third of agencies reported that less than 50% of children and youth who ended service with their agency had a positive response to treatment compared to the provincial average of 64%.

- **Better co-ordination with other ministries may help with the delivery of mental health services and improve the outcomes of children and youth.** Although the Ministry led the Ontario Government's Comprehensive Mental Health and Addictions Strategy (Strategy) from 2011/12 to 2013/14, the Ministry has not worked with the other ministries participating in the Strategy to identify whether further opportunities might exist to improve the way the province provides mental health services. In 2014, the responsibility to lead the Strategy transferred to the Ministry of Health and Long-Term Care.

Since 2012, the Ministry has led the implementation of the Moving on Mental Health Plan including taking a number of steps to help improve the program. Some steps taken were as follows:

- Defining core mental health services delivered by agencies.
- Committing to the Development and implementation of an equitable funding model for core mental health services delivered by agencies that reflects community needs.
- Selecting lead agencies in geographic areas that will be responsible for planning and delivering core mental health services. They will also be responsible for creating clear pathways to both core mental health services, and services provided by other sectors such as education and health, so that parents will know where to go for help and know how to get services quickly.

However, we found that while the Moving on Mental Health Plan was expected to be implemented in about three years, it has been delayed and it is unclear when the Plan is expected to be fully implemented.

This report contains 11 recommendations with 22 action items.

OVERALL MINISTRY RESPONSE

The Ministry of Children and Youth Services (Ministry) appreciates the work of the Auditor General and welcomes advice on how to further improve child and youth mental health (CYMH) services in Ontario. We are committed to addressing the recommendations to better serve the mental health needs of young people.

As part of the development of the Moving on Mental Health Plan and core mental health services, the Ministry undertook consultations to incorporate voices and input from the CYMH sector, partner ministries, the Parent and Youth Panel on System Change, and the Expert Panel on System Change.

The Ministry is committed to continuing the ongoing transformation of the CYMH system to improve services. To this end, the Ministry is building on existing work with ongoing improvements in the effectiveness, oversight and accountability of Ontario's CYMH system. In addition, the Ministry is also committed to refining performance measures, strengthening oversight, and using accountability tools.

OVERALL RESPONSE FROM CHILD AND YOUTH MENTAL HEALTH AGENCIES AND CHILDREN'S MENTAL HEALTH ONTARIO

This is a collective response of the four audited child and youth mental health (CYMH) agencies, together with Children's Mental Health Ontario (CMHO). CMHO represents more than 85 accredited community CYMH agencies providing specialized child and youth mental health treatment to children, youth, and families, including those with the most serious mental illnesses. We endorse the Auditor General's principles of better services for more children and youth that underpins this audit.

In the current context of steadily increasing demand for services and limited increases to funding in the last 10 years, CYMH agencies are challenged to implement new Ministry of Children and Youth Services (Ministry) service delivery requirements and maintain current service levels. Going forward, the CYMH agencies and CMHO will work with the Ministry to determine how best to meet all service delivery requirements while providing services to children and youth that are most appropriate to their needs on a timely basis.

Our vision is to build an exceptional mental health system for Ontario's children and we are committed to putting quality at the centre of our work. In consideration of this report, we recommend that the Ministry—in partnership with CMHO, CYMH agencies, other key stakeholders, and children, youth, and families—develop a provincial quality strategy that includes:

- provincial service standards (for example, admissions, wait time, client experience, client outcome standards);
- comprehensive performance measurement; and
- resources to support the strategy.

We thank the Auditor General for the opportunity to reflect on how we can improve our system of care. CYMH agencies alleviate pressure on other sectors such as education and health. Strong financial leadership support from the Ministry is needed to continue to build a high quality system of care. We are committed to collaborating with government, as partners, each step along the way.

2.0 Background

Refer to **Chapter 1** in this report for further background information on mental health services in Ontario.

2.1 Overview

The mental health of Ontario's children and youth is an important health issue. Approximately one in five Ontarians will experience a mental health problem in their lifetime and the majority of mental health problems begin in childhood or adolescence.

The method and responsibility for delivering mental health services to children and youth has changed over the last four decades. In the late 1970s, responsibility for child and youth mental health was transferred from the Ministry of Health to the Ministry of Community and Social Services. Prior to this transfer, services were mostly delivered through medical institutions such as hospitals and children's mental health treatment centres, and involved psychiatric assessment and treatment. This transfer was part of a significant restructuring of government social services from institutional to community-based services. Growth of community-based services followed, and service planning was largely driven by decisions at the community level with limited provincial direction on how to invest provincial funds.

In 2003, the Ministry of Children and Youth Services (Ministry) was created and now provides and funds community-based child and youth mental health programs and services in Ontario. These

programs and services target children and youth (as well as their families) from birth to 18 years of age who are experiencing, or are at risk of experiencing, mental health problems, illnesses or disorders.

In addition to services provided and funded by the Ministry, mental health services are also provided and funded by the Ministry of Health and Long-Term Care, which include primary care, psychiatry, addictions, hospital-based mental health services, and eating disorder programs. As well, the Ministry of Education has a role in promoting positive mental health, and connecting students with appropriate mental health services.

Some of the most common mental health disorders among children and youth are:

- anxiety;
- attention deficit/hyperactivity disorder (ADHD);
- depression and other mood disorders;
- schizophrenia; and
- eating disorders.

The Ministry's Child and Youth Mental Health (CYMH) program is funded under the authority of the *Child and Family Services Act* (Act). However, under the Act, the CYMH program is not mandatory and services under the program are instead provided to the level of available resources.

The Ministry provides CYMH services primarily through transfer payments to more than 400 service providers including agencies that are primarily focused on delivering CYMH services; hospital-based outpatient programs; and multi-service agencies that, in addition to CYMH services, deliver services for a number of programs funded by the Ministry, including Autism Services and Supports, Child Protection Services, Complex Special Needs, and Youth Justice Services.

In 2015/16, the Ministry spent $501 million on its CYMH program, including $438 million in transfer payments to CYMH agencies and other service providers to deliver child and youth mental health services. In 2015/16, these agencies reported over 120,000 registered clients and provided services to these children and youth that included counselling and therapy, intensive treatment, specialized consultation and assessment, and crisis support. The Ministry also funds a Tele-Mental Health Service, which provides psychiatric assessments and treatment recommendations via videoconferencing to rural, remote and under-served areas of the province; targeted programs to address mental health issues among Indigenous children and youth; and the Ontario Centre of Excellence for Child and Youth Mental Health to promote and disseminate information on evidence-based practices. In addition, the Ministry also directly operates the Child and Parent Resource Institute in London, Ontario, which provides clinical services for children and youth with complex mental health and developmental needs.

2.2 Ministry Co-ordination with Other Ministries Providing Mental Health Services to Children and Youth

In June 2011, the Ontario government launched its Comprehensive Mental Health and Addictions Strategy (Strategy), *Open Minds, Healthy Minds*, a 10-year strategy to deliver mental health and addictions services to Ontarians in an integrated, co-ordinated and effective way. The objectives of the Strategy are to:

- improve mental health and well-being for all Ontarians;
- create healthy, resilient, inclusive communities;
- identify mental health and addiction problems early and intervene; and
- provide timely, high-quality, integrated, person-directed health and other human services.

The Ministry led the implementation of the Strategy during the first three years (2011/12-2013/14) by focusing on increasing and enhancing services and supports for children and youth in three key areas: fast access to high-quality services; early identification and support; and helping vulnerable children and youth with unique needs.

Over this period, the Ontario government identified that it spent about $190 million in support of the Strategy. Under the Strategy, a number of initiatives were introduced by the Ministries of Children and Youth Services, Health and Long-Term Care, Education, and Advanced Education and Skills Development. See **Appendix 1** for a listing of key initiatives.

Since 2014, the Ministry of Health and Long-Term Care has led the Strategy and has changed the focus to adults, transitional-aged youth and other transitions in care, as well as addictions, funding reform, and performance measurement across the system.

2.3 Changes to Ministry-Funded Mental Health Services for Children and Youth

In November 2012, *Moving on Mental Health: A system that makes sense for children and youth* was launched by the Ontario government. The Moving on Mental Health Plan (Plan) is being led by the Ministry and builds on the Ontario government's 2011 Comprehensive Mental Health and Addictions Strategy. The Plan aims to provide a simplified and improved experience for children and youth with mental health problems and their families so that, regardless of where they live in Ontario, they will know what mental health services are available in their communities and how to access the services and supports that meet their needs. At the time the Plan was announced, it was expected to take about three years to fully implement.

The Ministry's specific efforts to implement the Plan included:

1) **Defining core mental health services.** The Ministry has developed definitions for seven core community-based CYMH services. The core services and their definitions are as follows:
   - **Targeted Prevention**—These services are focused on changing views and behaviours, building skills and competencies and/or creating awareness through the provision of information, education, and programming to at-risk populations.
   - **Counselling and Therapy**—These services are focused on reducing the severity of and/or remedying the emotional, social, behavioural and self-regulation problems of children and youth.
   - **Brief Services**—These services have the same focus as counselling and therapy services, but with a shorter duration of service.
   - **Family Capacity Building and Support**—These services are focused on enhancing the ability of families to support and respond to the mental health needs of children and youth.
   - **Specialized Consultation and Assessments**—These services are designed to provide advice in the assessment, diagnosis, prognosis and/or treatment of child or youth with identified mental health needs.
   - **Crisis Support Services**—These services are immediate, time-limited services, delivered in response to an imminent mental health crisis or an urgent situation as assessed by a mental health professional that places the child/youth or others at serious risk or harm.
   - **Intensive Treatment Services**—These services are targeted to children and youth who have been diagnosed/identified with mental health problems that impair their functioning in some or many areas. Intensive treatment involves a suite of services.
2) **Establishing lead agencies in defined service areas across Ontario that will be responsible for planning and delivering core mental health services and creating clear pathways to services.** The Ministry introduced the lead agency model, in which the Ministry will contract with lead agencies that will be responsible for the core mental health services provided in their designated geographic service area. Lead agencies will be

responsible for ensuring that all the Ministry's core mental health services are available, and that all core mental health service providers meet minimum Ministry requirements; they will also monitor and evaluate the performance of core mental health services to foster continuous improvement. Lead agencies will also be responsible for establishing clear pathways to both core mental health services and services provided by other sectors in the agency's service area, such as education and health so that parents will know where to go for help and how to get services quickly. The Ministry has identified 33 geographic service areas across Ontario, and to date it has identified lead agencies for 31 of these service areas.

3) **Developing a transparent, equitable funding model.** The Ministry has hired a consultant to help develop an equitable funding model for its core CYMH services that reflects community needs.

2.4 Delivery Standards for Child and Youth Mental Health Services

In 2013, as part of its actions to address the Moving on Mental Health Plan, the Ministry released a draft service framework for child and youth mental health. The framework included definitions for seven core community-based CYMH services (as described in **Section 2.3**) and established minimum expectations for their delivery that CYMH agencies were required to comply with beginning in the 2014/15 fiscal year. This represented the first time that the Ministry had established service delivery standards for all the core CYMH services it funds. The Ministry subsequently updated its minimum expectations in July 2015 with the release of its *Program Guidelines and Requirements #01: Core Services and Key Processes*. Through these guidelines, the Ministry outlined its expectations for the delivery of core mental health services from a client's first contact with an agency to discharge from the agency following the completion of mental health services.

2.4.1 Intake and Eligibility

Currently, children, youth and parents can access the services of a CYMH agency through methods that include contacting an agency directly or referrals to an agency by a health care professional or school. The intake process often represents the first point of contact for a child, youth or family with the CYMH service system.

As part of the intake process, a CYMH agency is required to confirm a child or youth's eligibility. Eligible clients are children and youth under 18 years of age that are experiencing mental health problems along levels two, three, and four on the Ministry's CYMH continuum of needs-based services and supports, as illustrated in **Appendix 2**. CYMH agencies are also required to assess the child/youth's mental health needs and urgency using evidence-informed assessment tools. Children and youth are then to be prioritized for service based on need and urgency, and immediate crisis support and response is to be provided to those at or in crisis (for example, impulsive self-harming behaviour).

2.4.2 Service Assessment, Planning, Review and Discharge

CYMH agencies are responsible for assessing the strengths, needs and risks of children and youth. This is to be accomplished through a combination of interviews, observation, and the use of standardized evidence-informed tools. This information is then used to determine a client's mental health service and treatment needs, to further prioritize them when the level of risk associated with their mental health problems is high, to help develop a service plan for their treatment, and to establish a baseline for outcome monitoring and measurement.

CYMH agencies must collaborate with each child or youth and their family to develop a written service plan that will guide and monitor the client's mental health treatment process. The service plan is to identify the child or youth's needs and the services to be provided to meet those needs. The

plan is also to outline who has responsibility for providing the treatment services, and the goals and objectives to be achieved.

CYMH agencies are to regularly review service plans to monitor client outcomes and the status of client needs as services are being delivered. This includes reviewing the effectiveness of treatment services using information obtained through a variety of means, including interviews, observations, and standardized evidence-based tools. The service plan is to be updated when a client's needs change, if services are added or changed, or when a client is to be discharged because they have completed their services with the agency.

The discharge of a child or youth from a CYMH agency is to be a planned process between the agency and the child or youth and family, and a written discharge is to be completed for each client. Clients can be discharged from an agency because they have generally met their treatment goals. They can also be discharged if the agency does not believe the child or youth can make further progress based on available services, or if the child, youth or family decides to withdraw from services at the agency.

2.4.3 Transition to Other Services and Follow-Up after Discharge from Service

When a child or youth is being discharged from a CYMH agency, and the child or youth is transitioning to either another CYMH agency or to another service system such as the education system or the adult mental health system, the agency is expected to work in partnership with the child or youth and their family, and the service provider the child or youth is transitioning to, to facilitate continuity of care that results in minimal disruption to mental health treatment gains.

Following the discharge of a child or youth from a CYMH agency, it is considered a best practice for the agency to follow up with the child or youth within three to six months of the discharge. The follow-up is intended to assess the child or youth's mental health status, and facilitate access to services where needed.

2.5 Funding Provided to Child and Youth Mental Health Agencies

Transfer payments to CYMH agencies (as illustrated in **Figure 1**) and other service providers to deliver child and youth mental health services totalled $438 million in 2015/16, an increase of approximately $62 million or 16% over the $376 million in transfer payments in 2007/08 when we last audited CYMH agencies. The vast majority of this increase is related to new programs and initiatives introduced as part of the Ministry's response to the Comprehensive Mental Health and Addictions Strategy, as described in **Section 2.2**.

The Ministry primarily distributes funding to CYMH agencies based on historical allocations. As part of the Moving on Mental Health Plan described in **Section 2.3**, the Ministry has hired a consultant that is in the process of developing a funding model to be used to allocate funding to each of the 33 geographic service areas the Ministry has established. The Ministry's goals for the new model include that funds will be:

- distributed on the basis of a consistent definition of community need for CYMH services and defined geographic communities; and
- allocated through a consistent framework that is transparent, fair, sustainable, and responsive to community needs.

2.6 Monitoring, Performance Measurement and Reporting

The Ministry is responsible for monitoring the effectiveness of the CYMH program and the agencies that deliver CYMH services. Prior to the 2014/15 fiscal year, the Ministry had two performance indicators for CYMH services – one related to wait times and one related to outcomes for children and youth. These performance indicators, which were publicly reported by the Ministry, were suspended in the 2013/14 fiscal year.

Figure 1: Ministry Transfer Payments to CYMH Agencies, 2007/08–2015/16 ($ million)

Source of data: Ministry of Children and Youth Services

	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16
Base funding for CYMH services	374	376	378	383	385	382	387	411	413
New Initiatives:									
New workers in community-based agencies	–	–	–	–	11	19	19	–	–
New mental health workers in schools	–	–	–	–	5	12	13	–	–
Aboriginal mental health and addictions workers	–	–	–	–	–	3	8	8	9
Lead Agencies System Redesign[1]	–	–	–	–	–	–	–	2	10
Other	2	2	2	3	3	3	5	7	6
Total	**376[2]**	**378[2]**	**380[2]**	**386[2]**	**404[2]**	**419[2]**	**432**	**428**	**438**

1. Funding provided to agencies to support their progress toward becoming fully operational as lead agencies.
2. Excludes transfer payments for Complex Special Needs, which before 2013/14 were reported as part of Child and Youth Mental Health transfer payments.

In 2014/15, the Ministry introduced 13 new performance indicators that all CYMH agencies had to report results on. These 13 performance indicators were designed by the Ministry to support provincial monitoring of the sector and to answer the following questions:

- Who are we serving?
- What are we providing?
- How well are we serving children, youth and families?
- How well is the system performing?

See **Appendix 3** for a list and description of each of the 13 new CYMH performance indicators.

3.0 Audit Objective and Scope

Our objective was to assess whether the Ministry of Children and Youth Services (Ministry) and child and youth mental health (CYMH) agencies have effective policies and procedures for ensuring that children in need of mental health services receive appropriate and timely services in accordance with program requirements; and whether funding provided to agencies is commensurate with the value of the services provided.

Prior to commencing our work, we identified the audit criteria we would use to address our audit objectives. These were reviewed and agreed to by senior management at the Ministry and the CYMH agencies we visited. Most of our audit work was conducted between January and July 2016.

The scope of our audit included a review and analysis of policies and procedures and relevant files, including the files of children and youth receiving mental health services at the four CYMH agencies we visited (Kinark Child and Family Services, Youthdale Treatment Centres, Vanier Children's Services, and Children's Centre Thunder Bay) to assess compliance with legislated and Ministry service delivery standards. We also interviewed appropriate staff at the Ministry's head office and at four of the Ministry's five regions (Toronto, Central, West, and North), as well as at the four CYMH agencies we visited.

We also met with senior staff at Children's Mental Health Ontario, which represents more than 85 CYMH agencies, to gain a better understanding of the children's mental health sector. In addition, we spoke with representatives from: the Ontario Centre of Excellence for Child and Youth Mental Health, an organization funded by the Ministry that promotes and disseminates information to CYMH agencies on evidence-based practices; Parents for Children's Mental Health, an organization that provides a voice for children, youth and their families who face mental health challenges; and the Provincial Advocate for Children and Youth to obtain their perspective on children's mental health services in Ontario.

4.0 Detailed Audit Observations—Mental Health Agencies

4.1 Agencies Fall Short of Consistently Meeting All Requirements When Delivering Services

The policies of child and youth mental health (CYMH) agencies we visited were not always in alignment with the Ministry's new requirements for the delivery of CYMH services as outlined in **Section 2.4**, and the agencies did not always deliver CYMH services that were in compliance with Ministry requirements designed to help ensure that children and youth are provided with mental health services that are appropriate to their needs. Our specific concerns at the CYMH agencies we visited are found in the following sections.

Further (as highlighted in **Section 5.2.1**) the Ministry does not provide clear program requirements to agencies, leaving room for interpretation and, therefore, inconsistencies across CYMH agencies.

4.1.1 Agencies Did Not Consistently Follow Up with Discharged Clients, or Help in Their Transition to Other Services Putting Treatment Gains Already Achieved at Risk

The CYMH agencies we visited did not always take sufficient steps to help discharged children and youth transition to other service providers if they required additional help. As well, we found that the CYMH agencies we visited did not consistently follow up with children and youth after discharging them to determine their mental health status and whether they required additional services.

Transition of Discharged Clients to Other Service Providers

At times, a child or youth is discharged from a CYMH agency, but requires transition to either another CYMH agency or another service system, such as the adult mental health system or the education system. As described in **Section 2.4.3**, in these cases the discharging agency is expected to work in partnership with the client, their family, and the new service provider in order to minimize disruption to the mental health treatment gains the client has already achieved. However, we found that none of the agencies we visited had policies in place to guide its staff on what steps to take when a client is discharged and needs transition to another agency or service system.

Based on the discharged files we reviewed where transition was required by the child or youth, we found that in practice, two of the agencies we visited did take steps to work with clients, their family, and other agencies upon discharge and transition. However, at the other two agencies we visited, we noted the following concerns regarding transitions:

- At one agency, we identified a few cases where a child or youth was discharged to the care of a children's aid society while still requiring service, but the agency did not provide any help to transition the clients to another mental health service provider. For example:

- In one case, a youth receiving mental health services was discharged due to excessive disruption, vandalism, and violent behaviour. Although the agency recommended that the youth seek the services of another agency, there is no evidence that the agency worked with the youth or another agency to facilitate the transition and continuity of service.
- In another case, a youth requested to be discharged and transferred to a different residential placement following a combination of abusive and disruptive behaviour. While it was clear that the agency identified the youth still required mental health services, the agency noted that it did not have available alternative resources to address the youth's needs within the agency and instead discharged the youth. There is no indication that the agency attempted to transition the youth to another service provider that could meet the youth's needs.

- At another agency, 50% of the discharged client files we reviewed included a recommendation to transition to another service provider. However, the agency did not work with the agencies it recommended to clients to help facilitate the transition, putting treatment gains already achieved at risk. Instead, it simply discharged these clients and provided them with contact information for the agency it recommended with no follow-up to ensure that the client actually did transition.

Follow-Up with Discharged Clients to Determine Mental Health Status

As outlined in **Section 2.4.3**, the Ministry notes that it is considered a best practice for a CYMH agency to follow up with clients within three to six months of discharging them to assess their mental health status and facilitate access to additional services for those that need them. However, we found that while one of the agencies we visited had followed up on the status of half the discharged clients we reviewed, the other three agencies had not followed up on the status of any discharged clients.

4.1.2 Mental Health Needs of Children and Youth Are Not Assessed Consistently, Increasing the Risk of Inconsistent Service Decisions

The Ministry requires that CYMH agencies assess the mental health needs of children and youth, and this process is to include the use of standardized, evidence-informed tools that are intended to enhance the consistency and objectivity of assessments. These assessment tools (for example, assessment forms) are to be used at various points in a client's progress through CYMH services. For example, initially, they are used to determine the mental health service needs of the client and to develop the initial service plan for treatment; and, during regular reviews of the treatment services provided to clients, they are used to help make changes to services and update the service plan when a client's needs have changed, including decisions to end services and discharge a client from the agency when treatment goals have been achieved.

However, we found that, at three of the agencies we visited, these standardized assessment tools were either not always completed, or it was not evident that they were used to help develop the initial service plans of children and youth. Specifically, we found that:

- At one agency, in about half of the cases we reviewed, standardized assessment tools were not used to help develop service plans.
- At the remaining two agencies, although standardized assessment tools were completed in the vast majority of cases, it was not evident in any of the cases we reviewed that the results of these assessment tools were used to develop the client's service plan.

In addition, we found that the agencies we visited either did not consistently complete standardized assessment tools or it was not evident that the

results of completed assessment tools were used to help update service plans and determine decisions to discharge children and youth. Specifically, we found that:

- At one agency, standardized assessment tools were completed in each file we reviewed to monitor and evaluate the child or youth's response to service. However, it was not evident that the results from these tools were used to review and update the service plan in half the cases we reviewed, nor in the decision to discharge the child or youth in almost 20% of the cases we reviewed.
- At another agency, we found that in about one-third of the files we reviewed, standardized assessment tools were not completed to monitor and evaluate the child or youth's response to service; and, in the two-thirds of files we reviewed that did use the tools, it was not evident in any of them whether the results from these tools were used to review and update the service plan, or in the decision to discharge the child or youth.
- At the third agency, we noted that, in over 40% of the files we reviewed, standardized assessment tools were not completed to monitor and evaluate the child or youth's response to service. As well, it was not evident that results from these tools were used to review and update the service plan in over 70% of cases we reviewed, or in the decision to discharge the child or youth in half of the cases we reviewed.
- At the remaining agency, we found that in over 70% of the files we reviewed, standardized assessment tools were not completed to monitor and evaluate the child or youth's response to service and to inform discharge decisions.

4.1.3 Absent Ministry Direction, Timelines for Reviewing Service Plans Varied between Agencies, Increasing the Risk of Delaying Children and Youth from Receiving Services Most Appropriate to Their Needs

Although the Ministry requires CYMH agencies to regularly review the service plan of each child or youth, it does not prescribe timelines for doing so, and we found that the agencies we visited had different policies regarding timelines for reviewing service plans. Such differences increase the risk of delays to children receiving services that are most appropriate to their needs. In contrast, we noted that there are legislative requirements that CYMH agencies have to comply with when delivering services in a residential setting. These requirements include specific timelines for reviewing plans of care (which are similar to service plans, but specific to residential settings). However, we found that the agencies we visited did not always comply with legislative requirements to review plans of care of children and youth receiving mental health services in a children's residence.

Review of Service Plans

As described in **Section 2.4.2**, the Ministry requires CYMH agencies to regularly review the service plan of each child or youth to monitor client outcomes and the status of client needs as services are being delivered, and to update the plan when the child or youth is not responding to treatment as expected, or when the child or youth's needs change and services are added or removed.

While the Ministry requires the regular review of each child or youth's service plan, as noted in **Section 5.2.1** the Ministry has not established a required timeline for doing so to facilitate consistency across the province. In the absence of Ministry direction, we found that the four agencies we visited had different timelines for reviewing and updating service plans ranging from three months to six months. As well, we found that, in some cases, they either did not follow their own timelines

or did not review the service plan at all as required by the Ministry. Specifically, we found that:

- One agency had a policy that required service plans to be reviewed and updated at minimum every 12 months. We found that in all the cases we reviewed, this requirement was met. We also noted this agency revised its processes midway through the 2015/16 fiscal year and now requires service plans to be reviewed and updated every three months.
- Two agencies had policies to review and update service plans every six months. While one of these agencies complied with this requirement in all cases we reviewed, the other agency did not review and update the service plan on time in 25% of cases we reviewed. On average, these service plans were reviewed and updated more than 60 days late, including one case where the review had yet to be completed at the time of our audit and was already more than four-and-a-half months late.
- The remaining agency only had a policy to review the service plan of children and youth receiving intensive treatment services in a children's residence. This agency's requirements were based on legislative requirements (discussed below) for all licensed children's residences. Based on our review of files of children receiving intensive treatment services both in a residential and non-residential setting, we observed that in practice the agency complied with these review requirements in more than 80% of the cases we examined. However, we noted that, contrary to Ministry requirements, this agency did not have a policy that required service plans to be developed and reviewed for children and youth who were not receiving intensive treatment services (and were instead receiving other services such as counselling and therapy). While the Ministry requires that service plans be developed and regularly reviewed in such cases, the agency advised us that it did not do so.

Review of Plans of Care

While the Ministry's requirements for the CYMH program do not include specific timelines to review and update service plans, we noted that there are legislative requirements under the Child and Family Services Act that prescribe timelines for completing, reviewing and updating plans of care in licensed children's residences in Ontario, irrespective of the programs they provide. Such programs can include child welfare, children's mental health, autism and developmental disabilities, palliative care, and open and secure youth justice facilities. These requirements identify that a plan of care must be completed within 30 days of admission to a children's residence, and must be reviewed within three months and six months of admission, and every six months thereafter. Similar to service plans, plans of care also require a description of the resident's needs, services to be provided, and goals to be accomplished through the plan.

We noted that in cases where children and youth received mental health services in a children's residence, agencies did not always complete and review plans of care on time. Specifically, we found that:

- At two agencies, 70% of plans of care were not completed within 30 days of admission as required. On average, these plans were completed almost 30 days late, including one case where the plan was completed more than 100 days late. For the other two agencies we visited, more than 80% of plans of care we reviewed were completed within 30 days of admission to a children's residence as required.
- At one agency we visited, plans of care were not reviewed within three months of admission 80% of the time. On average, these plans of care were reviewed 60 days late, including one case where the plan was reviewed more than 120 days after it was required to be reviewed. At the remaining three agencies we visited, almost 90% of plans of care were reviewed within three months of admission as required.

4.1.4 Agencies Cannot Demonstrate That They Update Children, Youth and Families on When They Will Receive Service

Although the Ministry requires CYMH agencies to inform children, youth and their families at regular intervals about their status on a wait list, in the majority of cases we reviewed at the four agencies we visited, we noted that clients were not updated about when they can expect to receive service.

Once a child or youth's mental health needs are assessed, and the services to be provided have been determined, the child or youth is placed on a wait list if services are not immediately available. The Ministry does not prescribe a timeline to agencies for updating clients on their waitlist status. Wait times can be long; for example, average wait times reported to the Ministry in 2015/16 exceeded six months for both counselling and therapy and intensive treatment services at three of the four agencies we visited. However, despite lengthy wait times, just one of the agencies we visited had a policy to periodically update clients about their status on the wait list, while the other three did not. In addition, based on our review of client files, we noted the following concerns at the four agencies we visited:

- At two of four agencies we visited, it was not evident in any of the files we reviewed that children, youth and their families were updated on their status on the wait list and how much longer they could expect to wait for service.
- At another agency, although it had a policy of sending a letter every three months to update children, youth and their families about their status on the wait list, in more than half of the cases we reviewed where the wait time exceeded three months, updates on the wait list had not been provided. As well, although we noted that some wait time letters contained information about when services were expected to begin, the agency advised us that their letters typically did not do so.
- At the remaining agency, although we observed that in almost half the cases we reviewed, letters had been sent to those waiting for service acknowledging that they were on the wait list, these letters did not contain any information about when services were expected to begin.

RECOMMENDATION 1

To help ensure that children and youth are provided with mental health services that are appropriate to their needs, child and youth mental health agencies should take steps to ensure that they comply with the Ministry of Children and Youth Services requirements and recommended practices, which include, for example, using evidence-informed tools to assess the mental health needs of children and youth, in the delivery of mental health services.

RESPONSE FROM CHILD AND YOUTH MENTAL HEALTH AGENCIES AND CHILDREN'S MENTAL HEALTH ONTARIO

The audited child and youth mental health (CYMH) agencies agree with the Auditor General's recommendation and embrace the need for change and the necessity to build a high-quality children's mental health system. Over the last few years, the Ministry of Children and Youth Services (Ministry) has developed and subsequently revised program guidelines and requirements that CYMH agencies had to transition to and address within a short time frame. Children's Mental Health Ontario and the audited agencies are committed to working together with the Ministry to ensure we comply with their requirements and recommended practices while ensuring that service levels and wait times are not adversely affected.

We plan to work with the Ministry, in partnership with other CYMH agencies and other relevant stakeholders, to establish a plan to determine and implement standardized assessment tools that will be used across all service areas, along with the resources to do so.

4.2 Agencies Need to Better Monitor the Services Provided to Children and Youth

The mental health of children and youth can deteriorate while they wait for mental health services. Therefore, consistently prioritizing children and youth for service based on their assessed need is critical. However, we found that none of the four agencies we visited could demonstrate that they had effective monitoring processes in place to help ensure that children and youth were consistently prioritized and provided with timely and effective mental health services based on assessed needs. In addition, we found that all four agencies did not require supervisors to review and approve key decisions and documents completed by caseworkers that are used to determine the services to be provided. As well, we found that none of the agencies had a quality-assurance process in place to periodically review whether children and youth received services that are most appropriate to their needs. Further, although we found that all four agencies periodically reviewed a sample of files of children and youth to assess their compliance with Ministry or agency-specific service delivery requirements, they could not demonstrate that the results of these reviews were used to improve compliance across the agency. Our specific concerns regarding the monitoring of mental health services by the CYMH agencies we visited are found in the following sections.

4.2.1 Lack of Supervision of Key Decisions by Caseworkers Could Increase the Risk of Negative Consequences for Children and Youth

The Ministry does not require CYMH agencies to implement mandatory supervisory approval of key decisions and documents concerning the mental health services provided to their clients to help ensure that adequate and consistent mental health services are provided to children and youth based on their needs. As a result, we found that none of the four agencies we visited had any formal supervisory requirements in place. For example, none of the agencies required a supervisor's sign-off on critical decisions and key documents made by caseworkers, such as assessments, service plans, reviews of service plans, and decisions to discharge clients from the agency.

Although not required, we noted that two of the agencies we visited had a common practice where supervisors reviewed some key documents, such as initial service plans and discharge summaries.

4.2.2 There is a Risk That the Mental Health of Children and Youth Can Deteriorate While Waiting for Service, but Little Is Done to Monitor Wait Time Trends and Their Impact

The Ministry has not established targeted wait times for mental health services that CYMH agencies are required to follow, and the CYMH agencies we visited do not currently monitor trends in wait times to assess their reasonableness and to identify issues that may require follow-up or corrective action. In addition, agencies do not track the impact of wait times on the mental health problems of children and youth waiting for service.

There is a risk that the mental health problems of children and youth can become more severe as they wait for service. At the agencies we visited, we noted that many children and youth wait a lengthy period of time for service. For example, as illustrated in **Figure 2**, at three of the four agencies we visited, the average wait times reported to the Ministry for counselling and therapy and intensive treatment services exceeded six months in the 2015/16 fiscal year.

Based on our visits, we found that just one of the four CYMH agencies we visited had a targeted time to provide mental health services to children and youth on wait lists. While we noted that this agency had set a target to provide service to 75% of children and youth within 90 days of referral to service, the agency reported that, on average over

Figure 2: Average Number of Days Children and Youth Waited for Services, 2014/15 and 2015/16[1]

Source of data: Ministry of Children and Youth Services

	Type of Service							
	Brief Services		Counseling and Therapy		Crisis Support Services		Intensive Treatment Services	
Agency	2014/15	2015/16	2014/15	2015/16	2014/15	2015/16	2014/15	2015/16
#1	78	287	233	217	14	15	248	224
#2	n/a[2]	n/a	12	12	0	1	14	11
#3	3	5	113	224	1	2	104	226
#4	33	76	74	208	n/a	n/a	127	353

1. As reported by agencies. Agency #2's wait times were estimates without records to substantiate them.
2. n/a – services not offered by agency.

a two-year period from 2013 to 2015, it provided service to just 68% of children and youth within 90 days. However, at the time of our audit, the agency advised us that it had suspended tracking and monitoring against this target because of recent changes in its service delivery model that it anticipated would temporarily increase wait times during implementation. The remaining three agencies had not set targeted times to provide services to children and youth on wait lists, and with few exceptions did not monitor trends in wait times over time to assess their reasonableness and to identify trends that require follow-up and corrective action. At the four agencies we visited, we also identified the following concerns related to wait times:

- None of the agencies captured information on the impact of wait times on the mental health problems of children and youth while they wait for service. However, most of the caseworkers at the agencies we visited indicated that the mental health problems of at least some or as many as half of the children they work with escalated while waiting for service. Significant examples of deterioration raised by caseworkers included instances where those exhibiting self-harming behaviour escalated to attempted suicide, and instances where those exhibiting aggressive behaviour escalated to a level that required police involvement and/or suspension from school.
- As noted in **Section 5.3.3**, all four agencies we visited identified that wait times captured using the Ministry's definition were of limited value to them in managing their operations, and none of the agencies used them to monitor their wait times, in part because they do not represent the wait time for a service from the date of referral to that service. **Figure 2** identifies the wait times reported by the agencies we visited, and the core services for which the Ministry has established performance indicators. While the agencies expressed that these wait times were of limited value to them, we reviewed them and determined that even with their limitations, the information highlights lengthy wait times and significant agency-to-agency differences that may nevertheless warrant agency and Ministry attention.

4.2.3 Agencies Cannot Demonstrate Children and Youth Are Prioritized for Service Based on Mental Health Needs and Risk

Although the agencies we visited told us they prioritize children and youth for CYMH services based on their mental health needs and risk as the Ministry requires, all four agencies could not demonstrate that they did so to help ensure that those presenting with the highest mental health

risk receive service first. In addition, based on our review of client files at two of the four agencies we visited, we found that, in some cases, children and youth had waited an extensive amount of time to receive service. Specifically, we found that:

- One agency had a good practice where they assessed and assigned a risk level to children and youth and then had a process to follow up and reassess the risk of low-risk clients every 90 days and high-risk clients every 30 days. However, the agency did not have documentation to illustrate that services had been prioritized using this information.
- Another agency also assessed and assigned children and youth a level of risk, but did not have documentation to illustrate that children and youth had been prioritized for service using this information. At this agency, the sample of files we reviewed identified many cases where children and youth had waited a lengthy time for service, including:
  - a case where a client with an urgent risk rating (which is third-highest in a four-tier rating system) waited 438 days for counselling and therapy without any explanation for the long wait; this was significantly higher than the average wait time reported to the Ministry for such a service by any of the agencies we visited, as illustrated in **Figure 2** in **Section 4.2.2**; and
  - cases where clients waited between 20 and 26 months for a psychological assessment that is used to help identify and determine a client's needs and services to be provided.
- Another agency had policies and processes to prioritize children up to two years old, and those requiring crisis services, but could not illustrate that all other children and youth were prioritized for service based on risk. At this agency, the sample of files we reviewed included many cases where children and youth had waited a lengthy time for service, including:
  - a case where a client waited almost 500 days, or more than four times longer than the agency average, for counselling and therapy;
  - another case where a client was still waiting for counselling and therapy after 330 days, or almost one and a half times the agency average; and
  - a case where a client waited almost 16 months for a psychiatric assessment that is used to help identify and determine a client's needs and services to be provided.
- The remaining agency did not have a policy that described how it prioritized children and youth for service, and could not demonstrate that it prioritized children and youth for service based on risk.

4.2.4 Agencies Do Not Monitor and Assess Outcomes to Determine if Clients Benefited from the Services They Received

We found that the agencies we visited did not consistently determine and record the outcomes of children and youth at the end of mental health service, as required by the Ministry. As well, all four agencies we visited did not monitor outcomes to assess their reasonableness and to identify trends that may require follow-up and corrective action, to help ensure children and youth receive appropriate and effective mental health services.

While the Ministry has not set targets for the proportion of clients that should achieve a positive outcome at the end of mental health services, we found that one of the four agencies we visited had set its own target of 80% in 2014. The agency reported that over a two-year period from 2012 to 2014, on average just 61% of clients ended service with a positive outcome. However, the agency did not assess why it did not achieve its target and what actions were necessary to meet its set target. This agency subsequently suspended monitoring against this target following a change in tools used to measure outcomes; and, in 2014/15 and 2015/16,

this agency reported to the Ministry that just 65% and 40%, respectively, of discharged children and youth achieved a positive outcome. The remaining three agencies had not established targets for outcomes and were not monitoring trends in outcomes to identify if follow-up and/or corrective action is needed. In addition, we noted that these three agencies had not recorded or reported outcomes for all children and youth who ended service, as required by the Ministry. This limits their ability to perform meaningful comparisons of outcome trends or to help identify opportunities for improvement. Specifically, we found that:

- Two of the agencies had not determined outcomes for all their clients for both 2014/15 and 2015/16, as required by the Ministry, and had instead estimated the number of clients with a positive outcome based on a sample of clients for which they had determined outcomes.
- The remaining agency had not determined outcomes for all children and youth that had ended service, as required by the Ministry, and had not recorded the correct number of total discharged children and youth.

4.2.5 Agencies Do Not Perform Quality Reviews of Files to Help Ensure the Right Services Are Provided and Cannot Demonstrate if Compliance Reviews are Used to Improve Agency Practices

Although CYMH agencies do perform compliance reviews to ensure, for example, service plans are completed, they do not perform quality assurance reviews to determine whether children and youth received the most appropriate services based on their mental health needs. In addition, with respect to the compliance reviews performed, agencies could not demonstrate that they communicated the results of their reviews across the agency so that all employees were made aware of deficiencies and could correct them in their own files.

RECOMMENDATION 2

To help ensure that children and youth who need mental health services are provided with services that are timely, appropriate to their needs, and effective, child and youth mental health agencies should review and enhance their processes to monitor the delivery of mental health services in the following areas:

- assess whether requiring supervisory approval of key caseworker decisions and documents that guide mental health services can help improve the quality and consistency of services provided to children and youth;
- establish agency-specific targets for wait times and monitor wait times against such targets to assess their reasonableness, and follow up and take corrective action where necessary;
- establish targets for the proportion of children and youth they expect to achieve positive outcomes at the end of service, and monitor outcomes against such targets to follow up and take corrective action where necessary;
- communicate the outcomes of file reviews that assess compliance with service delivery requirements to all agency staff to help ensure issues of non-compliance are addressed across the agency; and
- assess whether implementing periodic quality assurance reviews of files at agencies can help ensure that children and youth receive appropriate and effective services.

RESPONSE FROM CHILD AND YOUTH MENTAL HEALTH AGENCIES AND CHILDREN'S MENTAL HEALTH ONTARIO

The audited child and youth mental health (CYMH) agencies agree with the Auditor General's recommendation and are committed to continuing to put quality at the centre of their

work. The CYMH agencies and Children's Mental Health Ontario (CMHO) are aligned with the Ministry of Children and Youth Services (Ministry) in the need for strong clinical practice and appropriate monitoring of quality.

To fully respond to the recommendation the audited CYMH agencies and CMHO will work with the Ministry, in partnership with other CYMH agencies and other relevant stakeholders, to ensure there is a consistent effort to review and enhance monitoring processes provincially and address all areas of the Auditor General's recommendation.

One opportunity to set standards would be with respect to service wait times. We recommend that wait time benchmarks for select CYMH services be established.

4.3 Agencies Cannot Demonstrate They Monitor Staff Caseloads to Help Ensure Efficient and Effective Delivery of Services

We found that the Ministry still has not developed caseload benchmarks or guidelines for the CYMH program that CYMH agencies can use to compare against their own caseloads and assess their reasonableness. When we last audited the delivery of CYMH services by agencies in 2008, we recommended that agencies should establish reasonable staff-to-client or workload benchmarks. However, at the time of our follow-up to that audit in 2010, just one of the agencies audited in 2008 had established workload benchmarks. The agencies noted difficulties in establishing benchmarks because of a lack of relevant information for child and youth mental health services, and because of the variability of programs and client needs. As well, the agencies highlighted that they required the Ministry's support to develop workload benchmarks because of a lack of resources.

During our current audit, we also found that none of the CYMH agencies we visited based their staffing levels on an assessment of workload. In addition, while the agencies we visited had both documented and informal benchmarks that they indicated they used for most groups of employees, in most cases the agencies could not demonstrate that these benchmarks were based on comparisons with other agencies or best practices. As highlighted in **Section 5.2.2** and **Section 5.3.2**, we found there are differences in average caseloads and wait times between agencies in the province across all core mental health services that require review to identify potentially inefficient or ineffective and untimely service delivery. Perhaps just as significant a concern, we also found that none of the agencies we visited could demonstrate that they periodically monitored their staff caseloads for reasonableness and to identify variances from benchmarks that require follow-up and/or corrective action.

RECOMMENDATION 3

The Ministry of Children and Youth Services should work with Children's Mental Health Ontario and child and youth mental health agencies to develop caseload guidelines; and agencies should periodically compare themselves against these guidelines to help assess the effectiveness and efficiency of their operations.

RESPONSE FROM THE MINISTRY, CHILD AND YOUTH MENTAL HEALTH AGENCIES, AND CHILDREN'S MENTAL HEALTH ONTARIO

The Ministry of Children and Youth Services (Ministry), Children's Mental Health Ontario (CMHO), and the audited child and youth mental health (CYMH) agencies agree with the Auditor General's recommendation, and acknowledge the value of working toward the establishment of caseload guidelines, to enable comparisons across organizations and to help assess the effectiveness and efficiency of operations.

The Ministry will work with the sector, including CMHO, CYMH agencies and other

relevant stakeholders, to develop caseload guidelines that will take into account variables that impact caseloads such as case acuity, case complexity, geography and variability in the types of core services delivered.

4.4 Client Complaints Are Not Always Tracked by Agencies to Identify Areas That May Require Improvement

None of the CYMH agencies we visited maintained a log of client complaints (with the exception of complaints escalated to senior management) illustrating the type of complaint, when it was received and if and how complaints were resolved. Agencies also do not analyze complaints to identify trends that may require follow-up and/or corrective action to improve the agency's services provided to children and youth.

Clients can bring forth complaints for a variety of reasons, such as the length of wait lists for service, dissatisfaction with service delivery, and alleged harassment or abuse by agency staff members. Although each agency we visited had a documented complaints policy and process, none of the agencies maintained a log of all client complaints. Three of the four agencies we visited recorded only the complaints that were escalated to senior management, while the remaining agency recorded complaints that were escalated to any level of management. All other client complaints across all four agencies were not recorded in a log. Instead, we were informed that information related to all other client complaints is retained in individual client files. As a result, the complaint logs at the agencies we visited contained between just one and 21 total complaints for the last five years combined.

Since the agencies did not maintain logs of all client complaints related to their delivery of CYMH services, the agencies also did not analyze client complaints to identify trends over time, including by type of complaint to determine if follow-up and/or corrective action is necessary to improve the agency's services to children and youth.

RECOMMENDATION 4

To help improve the quality of the mental health services they provide, child and youth mental health agencies should track all client complaints and periodically review them to identify trends that may require follow-up and/or corrective action.

RESPONSE FROM CHILD AND YOUTH MENTAL HEALTH AGENCIES AND CHILDREN'S MENTAL HEALTH ONTARIO

The audited child and youth mental health (CYMH) agencies agree with the Auditor General's recommendation and will examine their existing client complaint policies to ensure that they capture all significant complaints. The CYMH agencies and Children's Mental Health Ontario (CMHO) concur that tracking complaints can provide helpful information to improve service quality. As clients are at the centre of care, we agree that identifying trends and building solutions to optimize client service is critical.

Fundamentally, complaints speak to the experience of children, youth, and families at CYMH agencies—but they are only one indicator. We will work with the Ministry of Children and Youth Services towards building client experience standards that holistically measure the service experiences of children, youth, and families and ensure that there are processes in place focused on continuous improvement of the client experience.

5.0 Detailed Audit Observations—Ministry of Children and Youth Services

5.1 Ministry Does Not Fund Agencies Based on Needs of Children and Youth Served

As was the case when we last audited the Mental Health Services program in 2003, the Ministry still distributes funding to CYMH agencies according to historical allocations, rather than the mental health needs of the children and youth they serve. In addition, the Ministry's plan to implement a new needs-based model to allocate CYMH funding for 2015/16 has been delayed and a timeline for its implementation has yet to be determined. As well, we were advised that the new needs-based model will not be used to allocate funding to Indigenous-operated agencies.

5.1.1 Agencies Are Still Not Funded Based on Assessed Need to Help Ensure Fair Distribution of Limited Funding

Similar to when we last audited the CYMH program in 2003, base funding that accounts for about 90% of total CYMH funding to agencies (as illustrated in **Figure 1** in **Section 2.5**) continues to be provided based on historical allocations. Although the Ministry committed to ensuring its limited funding is appropriately allocated to CYMH agencies based on the needs of the children and youth they serve, it has yet to undertake an assessment of CYMH needs at either a system-wide level or agency level.

Further, as highlighted in **Section 5.2.2**, we found that there are significant differences between agencies in costs per client served across core mental health services. These differences may be indicative of funding inequities between agencies. However, the Ministry has not investigated and assessed the reasonableness of these differences.

5.1.2 Ministry's Planned Funding Model to Allocate Funding Based on Mental Health Needs Has Been Delayed

The Ministry had targeted to fully implement the 2012 Moving on Mental Health Plan, which included a new funding model, in approximately three years. In 2015/16, when the new funding model was expected to be implemented, the Ministry only then hired a consultant to research and develop a new funding model. The funding model is intended to distribute funding to each of the 33 service areas the Ministry has established based on a consistent definition of CYMH community needs. However, the Ministry has not yet determined the process by which it will allocate funding to individual agencies within each service area. The Ministry also informed us that it still has not established a timeline for the implementation of the new funding model, and does not expect to have a timeline for the model's implementation until later in the 2016/17 fiscal year.

5.1.3 Funding for Indigenous-Operated Agencies Will Not Be Included in the Ministry's Future Funding Model to Ensure They Are Funded Based on the Needs of Those They Serve

Although the Ministry is in the process of developing a new funding model to allocate CYMH funding based on CYMH needs, the Ministry does not currently plan to incorporate funding to Indigenous-operated agencies in the new model. Instead, the Ministry expects to continue funding these agencies based on historical allocations. Funding allocated to Indigenous-operated agencies in 2015/16 totalled about $44 million.

RECOMMENDATION 5

To help children and youth to have access to consistent mental health services in Ontario, the Ministry of Children and Youth Services should:

- work to develop and implement as quickly as possible a funding model that allocates funding to child and youth mental health agencies that is commensurate with the needs of the children and youth they serve; and
- put in place a funding model to also allocate funding to Indigenous-operated agencies based on the mental health needs of the children and youth they serve.

MINISTRY RESPONSE

The Ministry of Children and Youth Services (Ministry) agrees with the Auditor General's recommendation to develop and implement a funding model as quickly as possible. The Ministry has collaborated with community members, research experts and partner ministries to support the development of a new funding model.

The Ministry anticipates the completion and finalization of the model in early 2017, with implementation anticipated to begin in 2018/19. The new funding allocation model will be based on defined community need for child and youth mental health (CYMH) services with funds allocated to geographic service areas. The Ministry will also take steps to determine the process it will use to allocate funding to individual CYMH agencies within each geographic service area.

The Ministry agrees in principle with the Auditor General's recommendation to allocate funding to Indigenous-operated agencies based on the mental health needs of children and youth they serve. Working with Indigenous partners, the Ministry will explore funding approaches for Indigenous-led CYMH services that reflect the mental health needs of Indigenous children and youth. The Ministry will then determine the risks and benefits of implementing these funding approaches to support better outcomes for Indigenous children and youth.

5.2 Insufficient Oversight of Mental Health Services Leading to Inconsistent Service and Non-Compliance at Agencies

Similar to when we last audited the CYMH program in 2003, we found that the Ministry is still not monitoring whether CYMH agencies provide appropriate services to children and youth and whether such services represent value for money spent. Since our last audit, the Ministry has established service requirements that CYMH agencies must follow in their delivery of mental health services. However, we found that several of these requirements are not clear, resulting in inconsistent practices among agencies delivering services. In addition, we found that there is insufficient oversight from the Ministry to ensure services are delivered by agencies in compliance with the Ministry requirements. We also noted differences among agencies in their costs per individual served and the number of clients served by agency staff. The Ministry does not review the reasonableness of these differences to determine if follow-up or corrective action is needed. Furthermore, the implementation of lead CYMH agencies, which is intended to help create clear, co-ordinated pathways to CYMH services, and to improve the quality, consistency, and availability of services, is delayed and expected to take more than twice as long as initially planned.

5.2.1 Ministry Does Not Provide Clear Program Requirements to Agencies and There Is Insufficient Ministry Oversight of Services Delivered by Agencies to Help Reduce the Risk of Inconsistent Service Delivery

Although the Ministry established minimum expectations for the delivery of core mental health services that CYMH agencies were required to follow beginning in 2014/15, these expectations are in some respects general, increasing the risk that they will be interpreted and applied inconsistently by CYMH agencies. For example:

- As identified in **Section 2.4.2**, the Ministry requires that the assessment of both the mental health needs of children and youth, and their response to mental health services and treatment, is to include the use of evidence-informed tools. However, the Ministry does not prescribe the specific tools to be used by agencies, which would help facilitate consistent results between agencies. Across the agencies we visited, we found that three different tools were being used. All agencies we visited informed us that it would be beneficial to have a standardized tool used by all agencies to help ensure consistency and comparability of results.
- While the Ministry requires that clients on waitlists be informed at regular intervals about their status, it has not provided guidelines for acceptable intervals. As a result, we found (as noted in **Section 4.1.4**) that just one of the agencies we visited had a policy to update clients about their status while on a waitlist, and in practice none of the agencies had informed the majority of clients about their status on the waitlist, including how much longer they should expect to wait before receiving service.
- As described in **Section 2.4.2**, the Ministry requires CYMH agencies to regularly review the service plan of each child or youth to monitor client outcomes and the status of client needs as services are being delivered, and to update the plan as needed. However, the Ministry has not defined what a regular basis is, nor has it provided guidelines for acceptable time frames for reviewing and updating service plans. As a result, at the agencies we visited, we found (as noted in **Section 4.1.3**) that their timelines for reviewing and updating service plans differed significantly, ranging from three to six months.

In addition, the Ministry has not implemented a process to monitor whether CYMH agencies are delivering core mental health services that comply with Ministry requirements and that are most appropriate to their clients' needs. As noted in **Section 4.1**, our review of files at the four agencies we visited identified a number of examples where CYMH agencies did not comply with the Ministry's requirements.

RECOMMENDATION 6

To enhance its oversight of the Child and Youth Mental Health (CYMH) program and to help ensure that consistent and appropriate services are provided to children and youth across Ontario, the Ministry of Children and Youth Services (Ministry) should:

- work with child and youth mental health agencies to further define its program requirements so that they can be consistently applied across Ontario by all agencies that deliver mental health services; and
- implement a process to monitor whether child and youth mental health agencies are delivering mental health services according to Ministry requirements.

MINISTRY RESPONSE

The Ministry of Children and Youth Services (Ministry) agrees with the Auditor General's Recommendation. In 2014/15, following the establishment of core child and youth mental health (CYMH) services as part of the Moving on Mental Health Plan, the Ministry implemented minimum expectations for core services and key processes that apply consistently to all Ministry-funded core service providers.

The Ministry is committed to building on these requirements, in partnership with child and youth mental health (CYMH) agencies, by identifying areas for improvement and further defining and clarifying program requirements, while recognizing the clinical expertise and decision-making that appropriately resides with service providers.

The Ministry will also develop and implement a process to monitor CYMH agency compliance with the Ministry's program expectations.

5.2.2 Ministry Does Not Assess the Significant Differences between Agencies in Costs per Client Served and Client Caseloads to Help Ensure Agencies Are Effective and Efficient

To ensure agencies are operating efficiently and effectively, and that the Ministry is obtaining value for the funding it provides, the CYMH agencies must report to the Ministry data about the services they are providing, their staffing, and finances. However, the Ministry does not assess this information to identify whether significant differences between agencies in costs per client served, and caseloads per agency worker, are reasonable or require Ministry follow-up and/or corrective action.

We obtained and analyzed the data reported by all the CYMH agencies, and determined that there were significant variances between the agencies' reported costs per case and caseloads per worker when compared to provincial averages. We noted that the Ministry had not performed its own analysis to identify and follow up on the reasonableness of such variances. **Figure 3** illustrates that the average cost per individual served by core service differed significantly between agencies and compared to the provincial average, and **Figure 4** illustrates that the average caseload at agencies also differs significantly between agencies and from the provincial average. Based on the data we reviewed, we noted the following significant differences from the provincial average that warrant Ministry follow-up to assess their reasonableness and to determine if corrective action may be required:

- Across all five core services identified in **Figure 3**, we found that about 20% of agencies reported average costs that were at least 50% higher than the provincial average cost.
- Across all five core services identified in **Figure 4**, between 16% and 24% of agencies reported average caseloads that were at least 50% larger than the provincial average. As well, almost 10% of agencies reported average caseloads for counselling and therapy that were more than twice the provincial average, and almost 15% of agencies reported average caseloads for intensive treatment services that were more than twice the provincial average. On the other hand, we found that across all five core services, between 26% and 49% of agencies reported caseloads that were less than half of the provincial average.

Figure 3: Average Agency Costs of Core Services per Individual Served (All Agencies), 2015/16

Source of data: Ministry of Children and Youth Services

Type of Core Service	Province-Wide Average* ($)	Highest* ($)	Lowest* ($)
Brief Services	937	3,021	151
Counselling and Therapy	1,681	3,939	224
Crisis Services	1,539	4,448	226
Intensive Treatment Services	12,506	50,352	639
Specialized Assessment and Consultation	1,680	5,107	188

* Figures exclude extreme outliers.

Figure 4: Individuals Served per Full-Time-Equivalent Worker (All Agencies), 2015/16

Source of data: Ministry of Children and Youth Services

Type of Core Service	Province-Wide Average #	Highest #	Lowest #
Brief Services	141	481	9
Counselling and Therapy	71	309	12
Crisis Services	100	295	12
Intensive Treatment Services	16	112	1
Specialized Assessment and Consultation	93	287	17

Note: Numbers exclude extreme outliers.

RECOMMENDATION 7

To help ensure that child and youth mental health agencies provide services that are both effective and efficient, and to ensure that the Ministry of Children and Youth Services is obtaining value for the funding it provides, the Ministry should periodically review agency caseloads per worker and costs per individual served; assess the reasonableness of costs and caseloads; and identify instances that require follow-up and/or corrective action.

MINISTRY RESPONSE

The Ministry of Children and Youth (Ministry) agrees with the Auditor General's recommendation. In order to support child and youth mental health (CYMH) agencies to be both effective and efficient, the Ministry will continue to work with the sector on the ongoing development of performance indicators and the collection of CYMH data. The Ministry will build upon this work to also include data to be collected with respect to agency caseloads, individuals served and associated costs.

The Ministry will also periodically review agency caseloads and costs per individual served to assess their reasonableness and to work with the sector and/or individual agencies in instances that require follow-up and/or corrective action.

5.2.3 Ministry's Plan to Improve Program Delivery through the Implementation of Lead Agencies Has Been Delayed

As identified in **Section 2.3**, the Ministry had targeted to fully implement the 2012 Moving on Mental Health Plan in approximately three years. The Plan included establishing 33 lead agencies across the province that would be responsible for providing core mental health services in their designated geographic service area, as well as monitoring the quality of services provided. However, four years after the Plan was introduced, 31 lead agencies have been identified so far, but none have assumed their full responsibilities yet. The Ministry now expects it will take until 2019/20 for all lead agencies to assume their full responsibilities. As well, in our discussions with staff at the Ministry and the lead CYMH agencies we visited, we identified concerns that might prevent lead CYMH agencies from effectively carrying out their responsibilities, and the Ministry from meeting the objectives of the Moving on Mental Health Plan, including:

- While the Ministry expects that some lead agencies will begin assuming their responsibilities for delivering core mental health services in their geographic area as of April 1, 2017, the Ministry has not yet developed accountability agreements that identify the specific responsibilities of the lead agencies, and the timeline for assuming their responsibilities is unclear.
- As outlined in **Section 2.3**, lead CYMH agencies will be expected to monitor the quality of core mental health services delivered in their area. However, all of the lead agencies we visited expressed concerns that the current Ministry performance indicators are insufficient to do so. They also identified that consistent client outcome measurement tools need to be implemented across the system for client outcomes to be comparable and monitoring to be effective.
- To support the goal of the Moving on Mental Health Plan to create clear, co-ordinated pathways to services, lead CYMH agencies are responsible for developing a community mental health report for their service area that focuses on the child and youth mental health services and supports delivered by other sectors such as education, health, child welfare, and youth justice. However, all lead agencies we visited indicated that they expect it will take several years, and as long as 10 years, before a fully functional community

mental health report is in place where all parties are aware of available services in the area and how to access them, and that regardless of where a youth or family first approaches for service, they will end up in the right place.

RECOMMENDATION 8

To ensure it meets the objectives of the Moving on Mental Health Plan, the Ministry of Children and Youth Services (Ministry) should work with lead child and youth mental health agencies to:

- establish accountability agreements that clearly describe the responsibilities of both the Ministry and the lead child and youth mental health agencies before lead agencies assume their responsibilities to provide core mental health services in their service delivery area; and
- explore opportunities to expedite the creation of clear and co-ordinated pathways to core mental health services, and services provided by other sectors, to help ensure that children and youth are connected with the right service regardless of where they approach service.

MINISTRY RESPONSE

The Ministry of Children and Youth Services (Ministry) agrees with the Auditor General's recommendation. Accountability has been a key priority for the Ministry throughout the Moving on Mental Health (MOMH) transformation. As the Ministry continues to work to operationalize the role of lead child and youth mental health (CYMH) agencies, modifications have been made to the future role of lead CYMH agencies, such that the Ministry will retain financial and contractual oversight of core service providers. These changes reduce administrative duplication and burden, while ensuring appropriate accountability and controllership.

The Ministry is working with lead CYMH agencies to develop appropriate accountability agreements before they assume their full responsibilities. These agreements will clearly articulate and support lead CYMH agencies in their roles and responsibilities, including planning for the delivery of core services and supporting continuous quality improvement.

As noted in the report, the development of clear, coordinated pathways is expected to take several years. With key foundations of MOMH now in place, the Ministry is placing greater emphasis on opportunities to expedite the creation of clear and coordinated pathways. As an important first step, the Ministry will work with lead CYMH agencies and experts to identify and build on best practices in the lead CYMH agencies' core community mental health reports.

The Ministry will also continue to engage with the Ministry of Health and Long-Term Care and partner ministries on the development of clear pathways, including transitions from youth to adult services, and transitions between hospitals and primary care to community-based services.

5.3 Ministry Does Not Effectively Measure the Performance of the Child and Youth Mental Health Program and Agencies

As in our previous audits of the Ministry's administration of the CYMH program, we continue to note that individual agency performance is still not being effectively measured against targets, and that the Ministry still does not effectively monitor client outcomes or overall program performance against measurable and meaningful targets. Since our last audit of CYMH agencies in 2008, the Ministry has developed performance indicators and collected data on these indicators from CYMH agencies. However, the Ministry is not using this data to monitor the performance of the CYMH program or CYMH agencies. As well, the indicators the Ministry is collecting data on may not be sufficient to enable the Ministry to comprehensively assess the performance of the CYMH program and CYMH agencies.

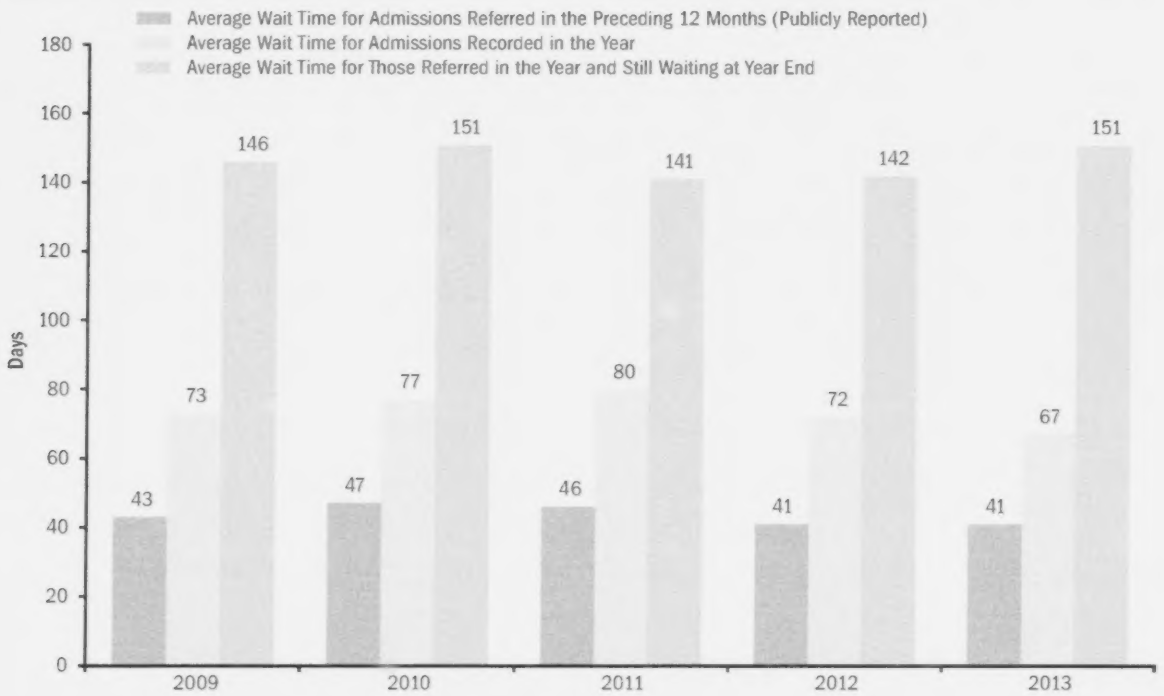
5.3.1 Publicly Reported Performance Indicators on Wait Times and Child and Youth Mental Health Outcomes Are Misleading

Although the Ministry established 13 new performance indicators in the 2014/15 fiscal year, it has yet to publicly report on any of them. In addition, performance indicators that were previously reported publicly—wait times to receive service and outcomes for those who completed service—were incomplete and misleading (reporting of these performance indicators was discontinued in 2013/14). Specifically, the Ministry publicly reported misleading results that presented the Ministry's program in the most favourable light rather than reporting complete, unbiased results. Specifically, we found that:

- The Ministry collected and reported results on these indicators from only a subset of child and youth mental health agencies (approximately 100) and did not identify that they were incomplete and did not reflect the results from all agencies.
- The Ministry reported results on certain clients and excluded others, skewing the results. The Ministry only reported wait times for children and youth that had sought and received service in the same year. Those who sought service in a given year, but received service in a subsequent year were excluded from the results. As well, the Ministry did not share the average wait time of those still waiting for service at the end of each year. **Figure 5** demonstrates that although the Ministry publicly reported that those who had sought and received service in 2013 waited an average of 41 days, it did not report that the average wait time for all who had received service in 2013 was actually 67 days, and that at the end of 2013 those that were still waiting for service had been waiting for an average of 151 days.
- The Ministry chose to publicly report the percentage of children and youth that showed any improvement in function at exit from mental health services instead of the percentage that

Figure 5: Average Wait Times for Mental Health Services, 2009–2013 (Days)

Source of data: Ministry of Children and Youth Services



showed a clinically meaningful improvement as defined by an assessment tool used by the Ministry. As illustrated in **Figure 6**, a lower number of children and youth demonstrated a meaningful improvement than those who demonstrated any improvement at all. For example, in 2013, while 76% of children and youth showed an improvement, 66% showed a clinically meaningful improvement at exit from mental health services.

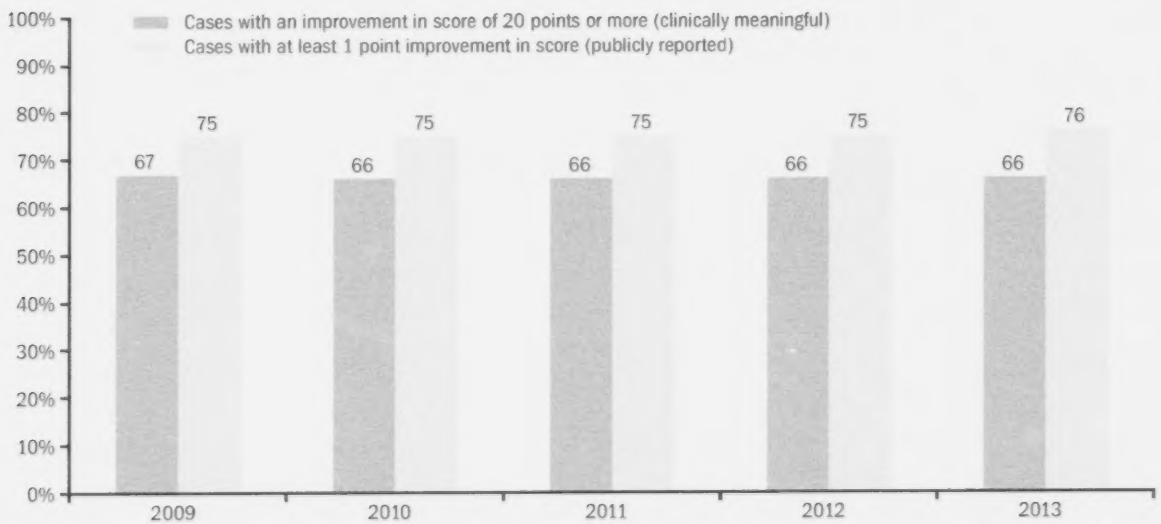
5.3.2 Ministry Does Not Monitor the Performance of the Program or Agencies to Facilitate Corrective Action Where Needed and Does Not Collect Data on All Current Ministry Performance Indicators

The Ministry is not yet using data collected from CYMH agencies on its performance indicators to monitor the performance of the CYMH program and CYMH agencies. In addition, the Ministry is not yet collecting data on all 13 of its new CYMH performance indicators, and it has not established targets for these indicators against which to measure the results reported by CYMH agencies. Specifically, we noted that:

- Data is only being collected on 10 of the Ministry's 13 new performance indicators described in **Appendix 3**. The Ministry has yet to determine when it will begin to collect data on the remaining three performance indicators, which include:
  - number of incidents (including serious occurrences and client complaints);
  - client perception of the service system; and
  - value for investment (basis of measurement to be determined, but to include the unit cost of services).
- Although the Ministry introduced its 13 new performance indicators in 2014/15, we noted it has not yet set targets for these indicators against which to measure the effectiveness of CYMH agencies.
- The Ministry has not analyzed the agency data collected on the indicators it introduced in 2014/15 to identify if follow-up and/or corrective action is needed at CYMH agencies. We obtained the Ministry's data and conducted

Figure 6: Percentage of Children and Youth Showing Improved Functioning at Exit from Mental Health Services, 2009–2013

Source of data: Ministry of Children and Youth Services



Note: The Ministry publicly reported the percentage of children and youth who showed any improvement (at least 1 point) in function at exit from mental health services instead of the percentage that showed a clinically meaningful improvement (20 points or more).

our own analysis, excluding data the Ministry deemed to be incomplete or inaccurate. Based on this analysis, we noted variances that warrant follow-up by the Ministry to determine if corrective action is needed and to identify potential leading practices that can be shared to promote improvement across all agencies. For example, we noted that in 2015/16:

- Nearly one in five agencies reported an average wait time for Intensive Treatment Services that was at least 50% longer than the provincial average of 89 days. We also noted that one in four agencies reported an average wait time that was at least 50% longer than the provincial average wait time for both Brief Services (33 days) and Counselling and Therapy (78 days). On the other hand, between almost 40% and almost 50% of agencies reported wait times for Brief Services, Counselling and Therapy, and Intensive Treatment Services that were less than half the provincial average.
- Nearly one-third of agencies reported that less than 50% of children and youth who ended service with their agency had a positive outcome compared to the provincial average of 64% across all agencies in 2015/16. Conversely, almost 40% of agencies reported that more than 80% of children and youth who ended service with their agency had a positive outcome.

- Prior to the introduction of its new CYMH performance indicators in 2014/15, the Ministry collected data on two performance indicators as described in **Section 5.3.1**—one related to wait times for child and youth mental health services, and another related to the outcomes of children and youth who had exited from mental health services. We noted that the Ministry collected these results in aggregate from third parties rather than from each individual agency, and so was not able to analyze the extent to which the results differed between agencies to determine if follow-up and/or corrective action was needed. We obtained a breakdown of agency-specific results and analyzed and identified significant differences that warrant follow-up. For example, we noted that:
  - While the average wait time for children and youth that received mental health services in 2013 was 67 days (as shown in **Figure 5** in **Section 5.3.1**), we noted that the average wait time at more than one in five agencies exceeded 100 days, including some where the average wait time exceeded 200 days.
  - While the percentage of children and youth that showed a clinically meaningful improvement in function at exit from mental health services was 66% in 2013 (as shown in **Figure 6** in **Section 5.3.1**), we noted that at 13% of agencies, less than 50% of children and youth showed a meaningful improvement at exit from services.

5.3.3 Ministry Performance Indicators Are Not Sufficient to Monitor the Performance of the Program and Agencies

The Ministry's current performance indicators for the CYMH program are not sufficient to effectively monitor the performance of the CYMH program and CYMH agencies. Specifically:

- The Ministry has identified a number of additional indicators that would help in measuring the performance of the CYMH program. However, the Ministry told us that a new Business Intelligence solution is required to collect the data for these additional indicators, as well as to enhance its ability to analyze data on existing performance indicators, including results specific to individual clients. However, full implementation of this solution is not expected until the 2019/20 fiscal year.
- The Ministry's current performance indicators do not capture the long-term outcomes of the children and youth that have received mental

health services through the CYMH program. Yet, the Ministry notes that unaddressed mental health issues can lead to poor academic achievement and higher school drop-out rates, unemployment, poverty, homelessness, and increased risk of criminal behaviour. Capturing data on long-term indicators could provide a more complete picture of the CYMH program's effectiveness, and inform future policy direction. The CYMH agencies we visited also noted that it would be beneficial to have performance indicators in place that measure the long-term outcomes of children and youth that have received CYMH services, such as high school graduation rates; post-secondary school enrolment rates; incarceration rates; and the percentage that access social assistance.

- The Ministry does not collect data on the number of children and youth by specific mental health illnesses or disorders to help inform future programming and policy decisions.
- CYMH agencies are required to assess and report on whether children and youth have had a positive outcome when services are completed or ended. However, we found that agencies are using different tools to measure positive outcomes and that the Ministry has not required a standardized measurement tool to be used. Putting in place standardized tools was highlighted as a priority in the 2011 Comprehensive Mental Health and Addictions Strategy (described in **Section 2.2**). As well, all CYMH agencies we visited and Children's Mental Health Ontario indicated that standardized assessment tools should be implemented to enable the meaningful comparison of results across the system on an objective basis.
- The Ministry may not be appropriately measuring wait times. The Ministry defines wait time as the time between first contact with the agency and receipt of service. Key steps—such as the time between first contact with the agency and assessment of mental health needs, and between referral to a service and receipt of service—are not captured to identify where problem areas exist. As such, the Ministry's definition of wait time may be too narrow and lead to misleading results. For example, if a client of a CYMH agency receives a service and is then referred to another service at a later date, the Ministry measures wait time from the client's first contact with the agency to the start date of that second referred service rather than from the date of referral to the start of that referred service; in this case, the wait time is incorrectly inflated. All four agencies we visited noted that wait times as defined by the Ministry were of limited value to them for managing their operations. Suggestions for improvement included capturing wait times from referral to receipt of a specific service, and capturing how much time a child or youth spends waiting for service compared to their time spent receiving service.

RECOMMENDATION 9

To help ensure the Child and Youth Mental Health program is performing as intended to deliver consistent and effective services to Ontario's children and youth who need it, the Ministry of Children and Youth Services (Ministry) should:

- work with Children's Mental Health Ontario, and child and youth mental health agencies, to identify and implement performance indicators and data requirements that are sufficient, consistent and appropriate to use to periodically assess the performance of the program and the agencies that deliver it;
- assess whether implementing performance indicators that measure the long-term outcomes of children and youth who have accessed mental health services can assist the Ministry to measure the effectiveness of the program and inform future policy decisions;
- assess whether collecting data on the number of children and youth with specific

mental health illnesses and disorders may help inform future policy decisions to better address the needs of children and youth; and

- set targets for its performance indicators and use the data it collects to identify instances that may require follow-up and/or corrective action.

MINISTRY RESPONSE

The Ministry of Children and Youth Services (Ministry) agrees with the Auditor General's recommendation and will assess its performance indicators and data elements with its sector partners, including Children's Mental Health Ontario and child and youth mental health (CYMH) agencies, and evolve them as the transformation of the CYMH program takes place to ensure the Ministry has sufficient information to assess the performance of the CYMH program and agencies that deliver CYMH services.

A CYMH Data Working Group was recently established with membership from a range of Ministry staff and lead CYMH agencies. The Ministry will work with this group to seek recommendations on new and revised performance indicators. The Ministry will use CYMH performance data to assess CYMH agency performance. This data will also be used to inform service delivery and policy design.

The Ministry will also work with its sector partners to assess feasibility of collecting information to inform analysis of long term outcomes for children and youth who have accessed mental health services.

Through the implementation of the business intelligence solution, the Ministry will also begin to receive additional data to more effectively serve children and youth, and undergo system planning.

The Ministry will also establish benchmarks for its performance indicators and compare performance data to benchmarks to evaluate, address and improve performance.

RECOMMENDATION 10

To ensure the public's confidence in the Child and Youth Mental Health program is maintained, the Ministry of Children and Youth Services should ensure that publicly reported results on the performance of the program provide information that is both accurate and meaningful.

MINISTRY RESPONSE

The Ministry of Children and Youth Services (Ministry) agrees with the Auditor General's recommendation. Through consultation with stakeholders, the Ministry is working to develop meaningful performance measures that will be reported publicly.

In addition, the Ministry has established a preliminary process to improve the consistency of data reporting. The planned implementation of a new business intelligence solution is expected to further improve the accuracy of reported data, will facilitate the collection of standardized client and service data and will support improved data quality.

5.4 Better Co-ordination with Other Ministries May Help with the Delivery of Mental Health Services and Improve the Outcomes of Children and Youth

The Ministry led the Comprehensive Mental Health and Addictions Strategy (Strategy) from 2011/12 to 2013/14, and introduced a number of initiatives, along with the other participants in the Strategy, the Ministries of Health and Long-Term Care, Education, and Advanced Education and Skills Development (as outlined in **Appendix 1**). We noted that the government's goals for the Strategy include reducing wait times, improving mental health outcomes, and reducing the per person cost of mental health services. However, to date the

Ministry has not worked with the other participating Ministries to determine the impact of their initiatives on the mental health outcomes of children and youth, or to identify and further leverage the initiatives that have led to positive outcomes.

We also found that the Ministry has not worked with the Ministries of Health and Long-Term Care, Education, and Advanced Education and Skills Development to identify whether further opportunities exist to improve the outcomes of children and youth, and potentially reduce wait times and the government's costs to provide mental health services, such as by focusing additional resources on mental health promotion, prevention, and early intervention. While the Ministry has not worked in co-ordination with these Ministries, the increase in emergency room visits and in-patient hospitalizations by children and youth for mental health issues is signalling a growing problem.

We obtained data from the Ministry of Health and Long-Term Care that indicates that between 2008/09 and 2015/16, emergency room visits by children and youth up to 18 years of age for mental health problems have increased by over 50% while emergency room visits for all reasons by all Ontarians have increased by just 17% over this same time frame. As well, based on data from the Canadian Institute for Health Information, we noted that from 2008/09 to 2014/15, in-patient hospitalizations for children and youth aged 5 to 24 for mental health problems also increased by over 50% in Ontario even though hospitalizations for all other conditions across Canada have actually declined.

The specific reasons for these increases in hospital utilization for mental health problems have not been tracked by either the Ministry or the Ministry of Health and Long-Term Care. Nevertheless, both the Ministry and the Ministry of Health and Long-Term Care indicate that community-based CYMH services can help prevent mental health problems from escalating and requiring visits to an emergency room or admission to hospital in-patient services. As well, although neither Ministry has comprehensively compared the cost of community-based CYMH services to hospital-based mental health services, both Ministries highlighted that community-based CYMH services, such as those focused on prevention and early intervention, can be provided at a lower cost than mental health services in a hospital. However, the Ministry advised us that it has not worked with the Ministry of Health and Long-Term Care to assess whether allocating additional resources to community-based CYMH services can help improve the outcomes of children and youth requiring mental health services; reduce in-patient hospitalizations and visits to emergency rooms for mental health problems; and lower the government's overall costs for mental health services. A number of sources highlight that exploring such opportunities may help achieve the government's goals to improve mental health outcomes and reduce costs, including the following:

- Children's Mental Health Ontario (CMHO), which represents more than 85 CYMH agencies in Ontario, has highlighted that timely access to community-based CYMH services can help prevent mental health crises from occurring and reduce the use of costly visits to hospital emergency departments. CMHO has also identified that the community-based sector does not have the capacity to provide treatment to all children and youth who need it, and that due to long wait times in the community-based sector for treatment, youth often go to hospitals. CMHO has proposed that funding for community-based CYMH services should be increased to help reduce costlier hospitalizations and reduce the government's overall costs.
- A recent report by the Canadian Institute for Health Information (Institute) noted that although there are several possible explanations for the increase in the use of hospitals in Canada by children and youth with mental health issues, the increase could point to a shortage of community-based services. The Institute also notes that experts suggest that services delivered at home and in communities

are the most effective when treating children and youth, and that repeat hospitalizations for mental disorders may indicate challenges in obtaining appropriate care in the community. As well, the Institute notes that bolstering the services of community-based CYMH agencies can help support improved outcomes for children and youth, reduce hospital use, and result in cost savings.

- Other recent reports have also identified that poor access to community-based services have likely contributed to increases in emergency room visits for mental health conditions in Ontario. As well, the Ontario Mental Health and Addictions Leadership Advisory Council (Council) identified in its 2015 annual report that mental health promotion, prevention, and early intervention can improve mental health outcomes. In addition, the Council identified that mental health promotion and prevention can yield significant net cost savings. The Council was appointed by the Ontario government in 2014 to provide advice on the implementation of the government's 2011 Comprehensive Mental Health and Addictions Strategy (described in **Section 2.2**).

RECOMMENDATION 11

To help meet the goals of the Comprehensive Mental Health and Addictions Strategy for improving mental health outcomes and reducing the per person cost of mental health services, the Ministry of Children and Youth Services should work with other ministries that provide mental health services to:

- determine the impact of their initiatives on the mental health outcomes of children and youth, and further leverage initiatives that result in improved mental health outcomes for children and youth; and
- further analyze the increases in in-patient hospitalizations and hospital emergency room visits by children and youth for mental health issues, assess the nature of these visits, and use this information to put in place actions to reduce visits by, for example, focusing on promotion, prevention and early intervention.

MINISTRY RESPONSE

The Ministry of Children and Youth Services (Ministry) agrees with the Auditor General's recommendation. Inter-ministerial co-operation and alignment of services is key to providing seamless services and supports on the ground. The Ministry has been working collaboratively with the Ministry of Health and Long-Term Care (MOHLTC), the Ministry of Education, and the Ministry of Advanced Education and Skills Development to implement initiatives that improve service delivery for children and youth.

The Ministry will build on qualitative assessments of initiatives introduced under Ontario's Comprehensive Mental Health and Addictions Strategy. The Ministry, along with government partners, will establish baseline child and youth mental health indicators with the intent to measure initiative outcomes and leverage best practices to further improve mental health outcomes for children and youth.

The Ministry also commits to working with MOHLTC to analyze and understand the rates of in-patient hospitalizations and hospital emergency room visits by children and youth experiencing mental health issues in order to take steps to reduce such visits by, for example, focusing on prevention and early intervention.

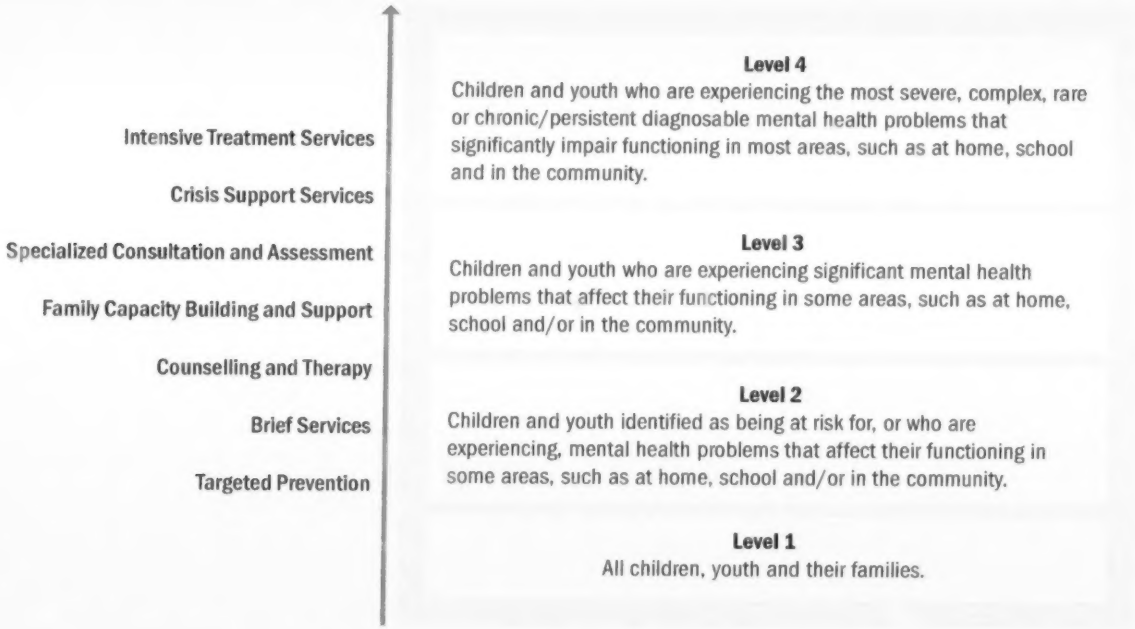
Appendix 1: Key Initiatives under the Mental Health and Addictions Strategy

Source of data: Ministries of Children and Youth Services, Health and Long-Term Care, Education, and Advanced Education and Skills Development

Ministry of Children and Youth Services (MCYS)
New community-based workers – MCYS provided funding to community-based child and youth mental health agencies to hire new workers to provide mental health services to children and youth in the community and in schools.
New Aboriginal workers – MCYS provided funding to hire and train Aboriginal Mental Health and Addictions workers in high-needs Aboriginal communities.
New mental health court workers – MCYS provided funding for new workers to expand service to new court sites to keep youth out of the justice system and refer them instead to community-based services.
Youth Suicide Prevention Plan – MCYS launched a youth suicide prevention plan focused on supporting communities in their local youth suicide prevention efforts to better respond to young people in crisis.
Tele-Mental Health expansion – MCYS expanded the Tele-Mental Health service that provides access to specialized mental health consultations and psychiatric assessments to rural, remote and underserved communities via videoconferencing technology.
Ministry of Health and Long-Term Care (MOHLTC)
Mental health and addictions nurses in district school boards – MOHLTC implemented nurses to work with district school boards and local schools to support the early identification and treatment of students with potential mental health and/or addiction issues.
Expansion of eating disorders treatment services – MOHLTC expanded eating disorder treatment services, including in-patient, day treatment, and out-patient programs for children and youth. The expansion included additional nurses and the introduction of new services for those with eating disorders.
18 service collaboratives – MOHLTC established service collaboratives in 18 communities with service providers working to improve access and transitions to mental health and addiction supports for children, youth and families across services and sectors.
Ministry of Education (MEDU)
Mental health leaders – MEDU implemented a mental health leader in each district school board in the Province to provide mental health leadership support in their school board, and to develop and implement a board-specific, comprehensive student mental health and addictions strategy.
School mental health (ASSIST) – MEDU implemented a provincial school support team designed to help school boards with the development and implementation of their mental health and addictions strategy, and to help school boards to build educator capacity for mental health literacy, to introduce evidence-based mental health promotion and prevention programs, and to help address specific mental health needs in the board.
Preface to curriculum – Beginning in 2013, a new preface has been added to the beginning of all recently revised curriculum documents entitled "Supporting Students' Well-Being and Ability to Learn." This preface sets the context for the educators' role in promoting and supporting healthy development for all students in all subject areas and includes a sub-section entitled "The Role of Mental Health."
Ministry of Advanced Education and Skills Development (MAESD)
Good2Talk postsecondary mental health helpline – MAESD implemented a post-secondary mental health helpline (Good2Talk) that provides bilingual 24/7 services that address the mental health needs of post-secondary students, including students who raise general mental health issues including depression, drug and alcohol dependencies, relationship problems, suicide ideation and other concerns.
Mental Health Innovation Fund – MAESD implemented the Mental Health Innovation Fund to fund projects with the potential to improve mental health services and outcomes for Ontario's post-secondary students.

Appendix 2: Continuum of CYMH Needs-Based Services and Supports

Source of data: Ministry of Children and Youth Service's *Program Guidelines and Requirements #01: Core Services and Key Processes*


Intensive Treatment Services
Crisis Support Services
Specialized Consultation and Assessment
Family Capacity Building and Support
Counselling and Therapy
Brief Services
Targeted Prevention
Level 4
Children and youth who are experiencing the most severe, complex, rare or chronic/persistent diagnosable mental health problems that significantly impair functioning in most areas, such as at home, school and in the community.
Level 3
Children and youth who are experiencing significant mental health problems that affect their functioning in some areas, such as at home, school and/or in the community.
Level 2
Children and youth identified as being at risk for, or who are experiencing, mental health problems that affect their functioning in some areas, such as at home, school and/or in the community.
Level 1
All children, youth and their families.

Appendix 3: New CYMH Performance Indicators

Source of data: Ministry of Children and Youth Services

Priority Area		Performance Indicator	Definition
Who are we serving?	P1	Proportion of Child and Youth Population Served	Number of children and youth served as a proportion of child and youth population, by community, with reference to estimated prevalence of mental health problems of 20%.
	P2	Profile of Children and Youth Served	Proportion of clients served in a given period, by gender and age at intake. Proportion of clients by category of assessed need and severity of need at time of first assessment.
	P3	Ages of Children and Youth Served	Average age of clients at intake.
	P4	Profile of Clients With Complex Mental Health Needs	The proportion of clients who display multiple needs, require multiple services and/or are involved with multiple providers.
What are we providing?	P5	Service Utilization	Proportion of clients by each core service, as a percentage of all services in a given period.
	P6	Service Duration	The average length of time between service start date and service end date, by service, for a given period.
	P7	Clients Receiving Brief Treatment Requiring No Other Services	Number of clients receiving brief treatment that require no further services.
How well are we serving children, youth and families?	P8	Clients with Positive Outcomes	Proportion of clients with positive response to treatment in a given period, based on all services in the service plan. Includes reduction in severity of needs, improved coping/functioning/strengths, identified goals being achieved and client perception of outcome.
	P9	Client and/or Parent/ Caregiver Perception of Positive Outcome (used to inform P8)	The proportion of clients with a perception of the service outcome as positive in a given period.
	P10	Number of Incidents (including serious occurrences and client complaints)	The number of incidents in a given period by type.[1]
How well is the system performing?	P11	Average Wait Times for Clients Receiving Services	Average length of time that clients wait for specific treatment services (not including clients who are scheduled for services at their request) in a given period.
	P12	Client Perception of the Service System[2]	Clients' perceptions of their experience with the service system (e.g., survey items to include wait times, integrated care, client involvement, service delivery and transitions).[1]
	P13	Value for Investment	Initially, total dollars invested in the program over time. In future, analysis will take into account number of clients served, varied levels of needs, severity and outcomes (to determine *value* for investment).[1]

1. This information is not currently collected.
2. Clients are children/youth and parents/caregivers.

Ministry of the Environment and Climate Change

Climate Change

1.0 Summary

Scientific studies indicate increased emissions of greenhouse gases, such as carbon dioxide and methane, from human activities have warmed the Earth's atmosphere and altered climate patterns around the world. Scientists have documented the effects of climate change including the melting of the polar ice caps, rising sea levels, and an increased number of extreme weather events.

The international community has highlighted climate change as an urgent and potentially irreversible threat to humans and the environment, and agreed an international response is required to reduce greenhouse-gas emissions.

Ontario accounts for less than 1% of the world's annual greenhouse-gas emissions, but Ontario's annual average emissions per person is higher than the global average, though lower than the Canadian average.

The Ministry of the Environment and Climate Change (Ministry) has also identified climate change as a critical global environmental and economic challenge that will bring increasingly severe weather to Ontario in coming years.

The Ministry has a mandate to lead Ontario's efforts to reduce greenhouse gases and adapt to the effects of climate change. To do this, it has defined emission-reduction targets and introduced policies and programs, one of the most significant of which is a cap-and-trade system set to commence in 2017. The rules for how cap and trade will operate in Ontario as well as how cap-and-trade revenues are to be spent have been set out in the *Climate Change Mitigation and Low-carbon Economy Act, 2016* and its regulations.

Under cap and trade, businesses that emit greenhouse gases will have to obtain "allowances" equal to their annual emissions—effectively a licence to emit. One allowance would permit the emission of one tonne of carbon dioxide, or its equivalent in other greenhouse gases.

These allowances can be provided free by the government, sold at government auctions, or bought and sold between emitters—the "trade" in cap and trade. "Cap" refers to the limited total number of allowances the government releases into the market annually.

In theory, as the government reduces the supply of allowances each year, the price would rise. Over time, therefore, businesses would find it more economical to develop ways to cut their emissions rather than buy increasingly costly allowances. Also, a business whose emissions are less than its allowances could generate revenues by selling those surplus allowances to other businesses that need them to continue operating.

Instead of an Ontario-only system, the province plans to link its cap-and-trade system to existing ones in Quebec and California, which means that businesses in all three jurisdictions will be able to trade allowances with each other. This would also allow one jurisdiction to claim an emissions reduction that was actually achieved in another.

The Ministry has said Ontario's cap-and-trade program and the revenue it generates for other initiatives will be key to Ontario's fight against climate change. It has also said that Ontario is on track to achieve its target to reduce 2020 emissions by 15% from 1990 levels. The Ministry has not finalized the design of Ontario's cap-and-trade system beyond 2020 and told us that its estimates and projections related to the impact of cap and trade beyond 2020 are very preliminary.

Our audit indicates that the cap-and-trade system will result in only a small portion of the required greenhouse-gas reductions needed to meet Ontario's 2020 target. Among our findings:

- **It is likely that less than 20% of reductions required to meet the province's 2020 target will be achieved in Ontario:** Of the 18.7 megatonnes (Mt) of greenhouse-gas emissions that will have to be cut to achieve the 2020 target, only 3.8 Mt (20%) are expected to be in Ontario. The remaining 80%—about 14.9 Mt—is actually forecast to be reduced in California and/or Quebec, yet Ontario plans to take credit for both its own 20% (3.8 Mt) reduction and this 80% (14.9 Mt) reduction occurring outside of Ontario. We note that the 2015 Paris Agreement allows one country to claim another's emissions reductions, but only if both federal governments (e.g., Canada and the United States) have formally agreed to such an exchange. At present, no such agreement exists. Further, the final determination of whether Ontario has met a given target is based on the National Inventory Report prepared by the federal government, which also does not count reductions occurring outside Ontario.
- **Small reductions in emissions in Ontario expected to come at significant cost to Ontario businesses and households:** Under the linked cap-and-trade system that the province plans to implement, Ontario businesses are expected to pay up to $466 million by 2020 to Quebec and California for allowances. Based on preliminary estimates by the Ministry in 2015 used to inform program design, that amount could rise to $2.2 billion in 2030—all of it money that will leave the Ontario economy. If initiatives outlined in the Government's Climate Change Action Plan are successful at reducing emissions over the long term, this number may be lower. In addition, Ontario households and businesses are forecast to pay about $8 billion more to the Ontario government over four years beginning in 2017 for fossil fuels such as gasoline and natural gas. The Ministry estimates households are expected to face an average increase in these direct yearly costs of $156 in 2017. Preliminary estimates by the Ministry of Finance indicate that this amount will rise to $210 in 2019 and that households are also expected to face additional yearly indirect costs on goods and services of $75 in 2019.
- **The Ontario Energy Board has ruled not to separately disclose the cost of cap and trade on natural gas bills despite stakeholder groups' interest in disclosure:** The Ontario Energy Board ruled that separate disclosure on natural gas bills is not necessary despite 75 of 80 stakeholder groups indicating a preference for such disclosure. Additionally, our survey of natural gas ratepayers found that 89% of respondents also thought it was important to disclose the impact of cap and trade on natural gas bills.
- **Under the linked system, Ontario's cap does not actually control the amount of greenhouse gases that can be emitted in Ontario:** Because Ontario has chosen to link with California and Quebec, Ontario

may exceed its own emissions cap if Ontario emitters decide to purchase allowances from Quebec or California. The cap on emissions set by the Ontario government consequently does not actually control Ontario emissions.

- **Ontario is not expected to help cut significant emissions in Quebec and California in the short term:** The Ontario government has said that this province's involvement in a linked cap-and-trade system will help reduce emissions in Quebec and California as businesses there become aware of a market in Ontario for their allowances. However, the Ministry has no evidence of this. In fact, allowance-trading information for Quebec and California as of August 2016 indicates there may currently be a surplus of allowances—over 60 Mt of allowances went unsold in the last auction, indicating that well over the 14.9 Mt of allowances that will be needed by Ontario companies are *already* available. This makes it unlikely that, in the short term, there will be any significant decrease in Quebec and California emissions as a result of Ontario businesses buying these allowances.
- **More emissions reductions may be reported than actually achieved:** No formal agreements or rules have been established among the three jurisdictions to prevent a reduction of emissions from being reported in more than one jurisdiction. For example, if an Ontario company buys an allowance from California, that allowance could be reported by the Ontario government as a reduction in Ontario, thereby helping Ontario meet its target. However, California may also count the same reduction toward its target—meaning more reductions overall would be claimed than were actually achieved.

In the four-year period from 2017 to 2020, the Ministry expects to raise about $8 billion in revenues from the sale of cap-and-trade allowances, and it has committed this revenue largely to emission-reduction initiatives.

These initiatives are identified in the Climate Change Action Plan (Action Plan) that the Ministry released in June 2016. The Action Plan estimates that these initiatives will collectively reduce emissions by 9.8 Mt—yet we noted that the Ministry's own environmental consultant estimated cap and trade and the spending of cap-and-trade revenues on these types of initiatives would yield reductions of only 3.8 Mt—slightly more than one-third the Ministry's estimate. Based on our review of the Action Plan, we noted that:

- **Action Plan contains unrealistic or unsubstantiated assumptions:** These include:
  - *Electricity price reductions will have marginal impact:* Cap and trade is expected to bring higher electricity prices, which may lead people to switch to cheaper natural gas—a fossil fuel that also produces greenhouse gases. Between 2017 and 2020, the Ministry plans to spend up to $1.32 billion of cap-and-trade revenues to address this issue. The Action Plan indicates that this will result in 3 Mt of reductions. However, neither the Ministry nor the provincial agency that oversees Ontario's electricity system could show how they arrived at the 3-Mt estimate. In addition, the $1.32 billion is expected to have only a small impact on reducing the expected electricity price increases. In particular, electricity prices are projected to increase by 14% for businesses and 25% for households; after applying the $1.32 billion, businesses will still face a 13% increase and households 23%.
  - *No plan for achieving renewable natural gas goal:* $100 million of cap-and-trade revenues is to be used to help natural gas distributors increase their use of biogas, a "renewable" natural gas made from the decomposition of organic materials. The Action Plan indicates this initiative will reduce emissions by 1 Mt. However, our review of information from the Biogas Association of Canada indicates that the

current production capacity for biogas is insufficient to meet this proposed demand. In fact, the required capacity to achieve the 1 Mt is 500 times more than what is currently available. The Action Plan does not indicate how this shortfall will be met.

- **Action Plan commits about $1 billion to previously approved initiatives:** Some initiatives, such as the Regional Express Rail transit project, were approved years before the Action Plan was created. By including these projects in the Action Plan, the Province has found an alternative way to fund their costs—but will not achieve any additional emissions reductions.

Our other findings include:

- **The Ministry achieved its 2014 emissions reduction target:** The Ministry achieved significant reductions in greenhouse gases by 2014, primarily due to closing all coal-fired power plants. The Ministry has also said that, had it not been for the 2008 economic downturn, Ontario would likely not have met its 2014 emission target.
- **Greenhouse-gas reductions not a priority elsewhere in government:** The reduction of greenhouse gases is not an established priority of many ministries, and there is no government-wide process to ensure climate change is adequately considered in decision-making processes. The mandates and key priorities of some ministries are in conflict with the goal of reducing emissions, and these divergent goals have not been addressed to ensure emissions reduction is considered in decision-making.
- **Many items from the 2011 Adaptation Plan never carried out:** The Ministry has taken little action to identify or follow up on key risks Ontario faces from the anticipated future effects of climate change. Although the Ministry issued an Adaptation Plan in 2011 that was to have been fully implemented by 2014, many of the actions set out in the Plan had not been completed as of August 2016. In addition, the Ministry had not reviewed this Plan to determine whether it should be updated to reflect current information. Areas that require significantly more action include:
  - strengthening winter ice roads to northern communities to protect the communities from increasing isolation caused by climate change; for example, the communities were more reliant on air transport last winter to bring in essential supplies such as food;
  - developing a Growth Plan to support northern community decision-making and monitoring on the impact of climate change, as well as measures to protect and preserve air and water quality;
  - updating provincial building codes to ensure that buildings can resist such effects of climate change as storm water flooding;
  - carrying out a Ministry commitment to review all the different types of buildings owned or controlled by the government to assess them for their resilience to the effects of climate change; instead, the Ministry reviewed only three of the almost 5,000 buildings directly owned or controlled by the Province; and
  - carrying out an assessment of energy infrastructure to ensure it can continue to produce and distribute power during increasingly extreme weather.

Subsequent to our audit, in October 2016, the federal government announced its intention to implement a minimum national carbon price, starting in 2018. The federal proposal is preliminary and, at the time of the completion of our audit, further details were not available to fully assess the impact of this new federal policy on Ontario's projected emissions reductions.

This report contains 16 recommendations with 28 action items.

OVERALL MINISTRY RESPONSE

The Ministry appreciates the Auditor General's report and its recognition of the importance of fighting climate change given its impact on Ontario's environment, economy and way of life.

Under our new climate change legislation, the Ministry will report to the public on progress in achieving targets and how cap-and-trade proceeds will be invested.

Cap and trade is an internationally recognized program for reducing greenhouse-gas emissions and achieving targets, including in the Paris Agreement. The ability to link our program to those in Quebec and California will enable Ontario to realize reductions at the lowest cost to business and consumers. The compliance period under Ontario's program starts January 2017. Ontario will negotiate an agreement with Quebec and California in 2017 to link its cap-and-trade programs under Western Climate Initiative, Inc. (WCI, Inc.) in 2018 in a way that meets its objective of meeting emissions reductions targets at the lowest cost to households and businesses. Ontario continues to work closely with the federal government to shape a national approach to pricing carbon emissions through the development of a pan-Canadian framework that aligns with the Paris Agreement on global climate change action.

Ontario will invest the proceeds of cap and trade into initiatives that will reduce or support the reduction of greenhouse gases. Estimated investments in the Climate Change Action Plan continue to be refined as detailed program design takes place across government. These investments, which will start in 2017, will reduce greenhouse-gas emissions, create new jobs, generate opportunities for investment in Ontario, and help people and businesses transition to a low-carbon economy.

As of October 2016, Ontario has implemented some of the actions in its first climate change adaptation plan and is developing a new plan, to be released in 2017, that will set out the priorities and actions Ontario will take to become more resilient to the effects of climate change.

2.0 Background

2.1 Global Warming and Climate Change

Science indicates that increased concentrations of greenhouse gases in the Earth's atmosphere, resulting primarily from the burning of fossil fuels, have contributed to an increase in the planet's surface temperature. This is referred to as global warming.

It does not matter where emissions occur; it is the global total of emissions that has an impact on global warming. Global warming has led to unprecedented changes such as rising sea levels, changing weather patterns, and increasingly frequent extreme weather.

Appendix 1 provides more information on global warming and climate change, including the types of greenhouse gases, and the risks attributed to global warming.

2.1.1 Ontario's Emissions

As **Figure 1** shows, the average emissions per person in Ontario are more than in some developed countries—and more than twice the world average. On the other hand, the Ontario average was less than the national Canadian average, and about 60% of the U.S. average (13 tonnes per Ontarian versus 20 tonnes per American, as seen in **Figure 1**).

Figure 2 shows Ontario's 2014 emissions by sector, according to the most recent data from Environment and Climate Change Canada, a department of the federal government, which compiles all emissions information for Canada through its National Inventory Report. Ontario relies on the National

Figure 1: Comparison of Greenhouse Gas Emissions by Jurisdiction, 2012

Source of data: World Resources Institute, Environment and Climate Change Canada

Jurisdiction	Emissions (megatonnes)	Population (million)	Emissions Per Person (tonnes)
World			
World	44,816.0	7,043.2	6
China	10,975.0	1,350.7	8
United States	6,235.0	313.9	20
European Union	4,399.0	501.3	9
India	3,014.0	1,236.7	2
Russia	2,322.0	143.2	16
Japan	1,345.0	127.6	11
Brazil	1,013.0	198.7	5
Germany	887.2	80.4	11
Indonesia	761.0	246.9	3
Mexico	724.0	120.8	6
Canada	718.0	34.8	21
Iran	715.0	76.4	9
Ontario	**171.0**	**13.4**	**13**
Sweden	53.7	9.5	6
Canada			
Alberta	260.0	3.8	68
Ontario	**171.0**	**13.4**	**13**
Quebec	82.0	8.1	10
Saskatchewan	72.0	1.1	66
British Columbia	63.0	4.5	14
Manitoba	21.0	1.3	17
Nova Scotia	19.0	0.9	20
New Brunswick	17.0	0.8	22
Newfoundland and Labrador	9.8	0.5	19
Prince Edward Island	2.1	0.1	14

Note: The most recent compilation of global emissions is only available as of 2012.

Inventory Report for historical emissions. The most recent data, in the 2014 National Inventory Report, indicates Ontario's per-person emissions are the fifth-lowest of the provinces and territories.

2.2 Responses to Climate Change

Overall, there are two types of strategies to address climate change: *mitigation* focuses on lessening the extent of global warming by reducing greenhouse-gas emissions, and *adaptation* focuses on reducing the potential harm caused by the effects of climate change.

In its Fifth Assessment (2014) Report, the Intergovernmental Panel on Climate Change highlighted the importance of both strategies. **Appendix 2** provides more general information about climate-change mitigation and adaptation.

Figure 2: Breakdown of Ontario's 2014 Greenhouse Gas Emissions by Sector

Source of data: Environment and Climate Change Canada

Sector	Carbon Dioxide Equivalent (Mt)	% of Total Ontario Emissions	Most Common Sources of Emissions
Transportation	58.7	34	Combustion-engine (gas burning) cars, trucks, farm equipment, commercial vehicles, freight trains, boats, recreational vehicles
Industry	50.9	30	Industrial processes (cement, lime, iron and steel), manufacturing
Buildings	34.8	20	Heating for residential and commercial buildings using natural gas, including houses and apartments; cooking with natural gas
Agriculture	10.0	6	Animal manure, artificial fertilizers
Waste	9.4	6	Decomposition of organic material; waste-water handling, including sewage; and waste incineration
Electricity	6.2	4	Natural gas power plants
Total	**170.0**	**100**	

Note: Not all electricity generated in the province produces greenhouse gases. According to the Independent Electricity System Operator, in 2014, 62% of Ontario's electricity was generated from nuclear, 24% from hydro, 10% from natural gas, 4% from wind, with coal, biofuels, and solar together generating less than 1%. Since the closure of Ontario's last coal plant in 2014, most greenhouse gases from electricity come from the burning of natural gas.

2.2.1 Mitigation in Ontario

In 2007, the Ministry of Environment and Climate Change (Ministry) released a climate-change mitigation plan called the GO Green Action Plan (Plan). The Plan contained the following targets for reducing Ontario's annual emissions, using the 182 Mt produced in 1990 as a baseline (in 2015, a midterm target for 2030 was added):

- 2014—6% below 1990 levels, currently estimated to be 171 Mt;
- 2020—15% below 1990 levels, currently estimated to be 154.7 Mt;
- 2030—37% below 1990 levels, currently estimated to be 114.7 Mt; and
- 2050—80% below 1990 levels, currently estimated to be 36.4 Mt.

The Plan indicated that 44% of the 2014 target would be achieved by phasing out coal power and increasing the use of renewable energy. The rest would come from results of funding for research and innovation (17%), grants and loans to assist municipalities in reducing emissions (8%), and other initiatives such as transit projects and building retrofits (refer to **Figure 3** for an outline of initiatives and expected reductions). These forecast reductions were based on such assumptions as completion dates for transit projects and adoption rates for new technologies such as high-efficiency furnaces.

In November 2015, the Ministry introduced a Climate Change Strategy, which provided a high-level overview of the government's climate-change plans. The government then passed the *Climate Change Mitigation and Low-carbon Economy Act, 2016* (Act) the following year. The Act outlines Ontario's greenhouse-gas targets, requires the government to develop climate-change action plans, lays the legal framework for a cap-and-trade system, and outlines how cap-and-trade revenues are to be spent.

One regulation under the Act outlines the rules of cap and trade, while another spells out the greenhouse-gas reporting requirements for emitters. The Ministry has indicated that more regulations will eventually be enacted.

In June 2016, the Ministry released a new five-year mitigation plan, called the Climate Change Action Plan 2016-2020 (Action Plan), which identified cap and trade as a "cornerstone" of the province's mitigation efforts. **Figure 4** explains examples of other options, such as regulations, that the gov-

Figure 3: Ontario's 2007 Climate Change Action Plan

Source of data: Ministry of the Environment and Climate Change

The following chart lists the initiatives of the 2007 Climate Change Action Plan and the amount by which each initiative was expected to have reduced greenhouse gas emissions after seven years (by 2014).

	Expected Emissions Reduction by 2014	
Initiative	**Mt**	**%**
Green power (a $150-million investment to replace coal with renewable power)	26.8	44
Research and innovation (a $650-million investment in the Next Generation of Jobs Fund and a $527-million investment in the Ontario Research Fund)	10.4	17
Federal plan for industrial reductions	6.7	11
Municipal Eco Challenge (a $220-million investment in a grant and loan program to help municipalities reduce greenhouse gas emissions) and other actions	4.9	8
Other policies (e.g., Greenbelt protection)	4.3	7
Freight and diesel initiatives	3.0	5
Passenger vehicles and transit (includes MoveOntario 2020—now called The Big Move—a $17.5-billion investment in 52 transit projects)	3.0	5
Home-related initiatives (e.g., home energy audits)	1.8	3
Total	**61.0***	**100**

* The Ministry has not measured the success of these individual initiatives in achieving the expected emissions reductions.

ernment may also use to encourage people to reduce emissions. The Action Plan includes a number of actions to be funded through revenues from cap and trade. These items are outlined in **Figure 5**.

2.2.2 Ontario's Cap-and-Trade System

The Ontario government first committed to join a cap-and-trade system with other North American jurisdictions in 2008 by signing a memorandum of understanding with Quebec.

Quebec and California each implemented such systems in 2013, and linked them in 2014, but Ontario did not join them then; instead, Ontario re-announced in April 2015 its plans to implement cap and trade by 2017, and to link with Quebec and California.

As with Quebec and California, Ontario's cap-and-trade program will be administered in part by WCI, Inc., a non-profit organization based in the United States. The Ministry has obtained approval to pay WCI, Inc. almost $9.9 million between 2016/17 and 2020/21 to provide administrative services for Ontario's system, including the tracking and monitoring of cap-and-trade allowances traded by individual businesses, and the facilitation of allowance auctions. **Appendix 3** provides more information about WCI, Inc.

For a chronology of Ontario's climate-change activities, see **Appendix 4**.

Under the Linked System, Ontario's Cap Does Not Actually Control the Amount of Greenhouse Gases That Can Be Emitted in the Province

Ontario's cap-and-trade system is expected to cover about 80% of the province's annual greenhouse-gas emissions, including those from the transportation, industry, buildings and electricity sectors, all referred to as "covered" sectors. The rules for Ontario's cap-and-trade program are set out in **Appendix 5**. **Figure 6** explains which participants receive free allowances under Ontario's cap-and-trade system.

Figure 4: Policy Options for Reducing Greenhouse-Gas Emissions

Prepared by the Office of the Auditor General of Ontario

Policy Option	How it Works	Benefits	Challenges
Cap and Trade[1]	**Applies to:** businesses that are required to participate. **Description:** participating businesses have to obtain allowances (1 allowance per tonne of emissions) equal to their total greenhouse gas emissions. Allowances can be provided for free by government or bought at auction or directly from other businesses. **The price of allowances** is determined by the demand and supply of allowances in a carbon market. Governments can set floor or ceiling prices for auctions. **To be effective:** Supply of allowances per year (Cap) decreases over time such that total emissions decrease. **Example in practice:** California, Quebec and Europe	Government can reduce supply of allowances to meet overall emissions targets. Flexible for participating businesses since they have multiple options, including reducing emissions, buying allowances, buying offset allowances, and banking allowances. Creates a market that can provide an economic opportunity for businesses to trade. Is not called a tax and is politically easier for the government. In theory, participating businesses will make most efficient reductions first.	Complex and difficult to understand. Linking systems means individual jurisdiction loses control over the supply of allowances. Much more government administration and oversight is needed. May not reduce emissions if supply of allowances exceeds demand.
Carbon Tax[1]	**Applies to:** businesses and/or consumers **Description:** The government adds a direct tax to the emission of greenhouse gases, usually applied to the consumption of fossil fuels, such as gasoline. The government may choose to charge these taxes to individuals and/or businesses. The government controls the price. **To be effective:** Cost has to be high enough to discourage use of fossil fuels. **Examples in practice:** British Columbia and Sweden	Government controls the cost to emit. Simpler and easier for businesses and consumers to understand. Minimal additional administration required (as tax administration services already exist). Emitters are treated equally (the same carbon price is applied no matter the type of activity). In theory, emission reductions will occur where most efficient first.	Inflexible for businesses (compared to flexibility of cap and trade). Less economic incentive to reduce emissions compared to cap and trade since a low-emitting company can sell its reduced emissions in form of an allowance. May not reduce emissions if tax is not high enough.

Policy Option	How It Works	Benefits	Challenges
Regulations[2]	**Applies to:** businesses and/or consumers (based on regulation). **Description:** Regulatory policies involve government setting laws or regulations that limit emissions. Regulation may require reducing emissions to a certain level, switching fuels or installing a particular technology. **To be effective:** Regulations have to force overall emission reductions and laws must be complied with. **Examples in practice:** Canada has a minimum fuel efficiency law for new vehicles sold in Canada.	Able to control emissions at an individual emitter level. Changes are made that may not have been made otherwise such as building code improvements that increase costs of buildings.	Can impose a high cost to make a change. May not encourage further innovation to improve emissions beyond the legal minimums. Higher mandated fuel efficiency can encourage more overall use and reduce the emissions benefits from the higher efficiency. Government may not choose most effective or efficient technology or sector to reduce emissions in.
Voluntary Programs	**Applies to:** businesses and/or consumers **Description:** government programs intended to encourage emission reductions, where participation is optional. **To be effective:** Programs would need to encourage reductions above what would have already been done. **Examples in practice:** Subsidies provided to consumers purchasing an electric vehicle, a program for replacing inefficient furnaces, or providing transit services to discourage car use.	Business and consumers have the choice to participate. For new emission-reducing technologies that are not well-known, can help to increase public awareness and adoption.	Behaviour may not change as a result. May not encompass enough emitters to significantly reduce overall emissions. May subsidize those who would have used the technology anyway.

1. Cap and trade and carbon tax are both forms of carbon pricing that charges for emitting greenhouse gases and is used to influence businesses and consumers to reduce their emissions. It is expected that emitters will take measures to reduce emissions if the cost to do so is less than the cost to emit (either allowances or tax). Governments can use the revenue generated in different ways such as reinvesting in programs to further reduce emissions, reduce government debt, fund other social or economic programs or redistribute the revenue through equal tax breaks and credits (commonly referred to as revenue neutral).
2. Regulatory policies involve setting rules that limit emissions.

Figure 5: Projects Designed to Reduce Emissions to be Funded from Proceeds of Cap and Trade

Source of data: Ministry of the Environment and Climate Change

Key Initiatives in Action Plan[1]	Cost (Low End)[2] ($ million)	Cost (High End)[2] ($ million)	Forecasted Emissions Reductions in 2020 (Mt)
Reduce electricity bills	1,000.0	1,320.0	3.00
Creation of the Green Bank, a new government agency, to provide programs and services to help industry and business increase use of low-carbon technologies	875.0	1,100.0	2.50
Infrastructure Subsidy for fuel distributors to increase availability of renewable fuels	115.0	175.0	2.00
Introduce a renewable content requirement for natural gas	60.0	100.0	1.00
Green Commercial Vehicle Program and low-carbon fueling stations	215.0	290.0	0.40
Ontario government buildings retrofits and updated government emission targets	165.0	175.0	0.20
Subsidy for home upgrades and low-carbon technologies (New Homes Rebate)	681.0	824.0	0.18
Assist Agri-Food Sector in adopting low carbon technologies	50.0	115.0	0.15
Improve energy efficiencies in schools and hospitals	400.0	800.0	0.11
Support for municipalities: grants for emission reduction projects, supporting community energy planning, and energy mapping	270.0	325.0	0.10
Energy efficiency retrofits for social housing and grants for apartment building retrofits	680.0	900.0	0.10
Increase the use of electric vehicles and replace less efficient vehicles	246.8	277.0	0.05
Implement Ministry's Waste-Free Ontario strategy	20.0	30.0	0.04
Improve cycling infrastructure and encourage cycling and walking	150.0	225.0	0 (enables post 2020 reductions)
Regional Express Rail (Electrification of GO Rail project)	355.0	675.0	0 (enables post 2020 reductions)
Retrofit heritage buildings	40.0	80.0	0 (enables post 2020 reductions)
Support Ontario's clean tech sector	140.0	235.0	0 (enables post 2020 reductions)
Home energy audits	200.0	250.0	Not provided
Train workforce for development of low-carbon buildings (e.g., building materials science, materials design)	45.0	70.0	Not provided
Collaborate with Indigenous communities	85.0	96.0	Not provided
Set tax and regulatory to encourage innovations	–	1.0	Not provided
Create the Global Centre for Ultra Low-Carbon Mobility, based out of a post-secondary institution, to advise government on low-carbon transportation and to direct funding for research	100.0	140.0	Not provided
Develop a Land Use Carbon Inventory (understand how to measure how land and forests remove and store carbon)	2.0	3.0	Not provided
Implement Agricultural Soil Health and Conservation Strategy	30.0	30.0	Not provided
Plant 50 million trees across the province by 2025	0.5	1.5	Not provided
Reduce road congestion: grants for municipal transportation management plans	10.0	20.0	Not provided

Key Initiatives in Action Plan[1]	Cost (Low End)[2] ($ million)	Cost (High End)[2] ($ million)	Forecasted Emissions Reductions in 2020 (Mt)
Other initiatives using cap and trade proceeds			
Electric vehicle charging stations in government locations	0.5	2.0	Not provided
Car dealership program to provide training to increase electric vehicle sales	10.0	20.0	Not provided
Electric school bus pilot project in five communities	10.0	10.0	Not provided
Climate change partnerships with community organizations and private sector to reduce emissions	7.0	7.0	Not provided
OPS Carbon Challenge: competition for public service employees to develop greenhouse gas reduction project	0.3	1.0	Not provided
Ontario Public Service Climate Change Information Centre: online database for public service greenhouse gas tools	1.0	2.0	Not provided
Climate change training for Ontario Public Service employees	0.3	1.0	Not provided
Finalize a Wetlands Conservation Strategy for Ontario	0.5	1.0	Not provided
Total	**5,964.8**	**8,301.5**	**9.83[3]**

1. Initiatives that will not require the use of proceeds from cap and trade have not been included here.
2. A range of costs have been provided from the Ministry for each initiative to reflect the uncertainty of how much each will cost. Spending on each initiative may be adjusted downwards or upwards relative to cap-and-trade revenues collected.
3. The Ministry's environmental consultant estimates that spending cap-and-trade revenues on these types of initiatives will result in emission reductions of only 3.8 Mt in 2020.

A regulation of the Act outlines Ontario's cap—the total number of allowances the Ontario government will make available to emitters each year—from 2017 to 2020. The cap in 2017 is set at 142.3 million allowances (for 142.3 Mt of emissions), equivalent to the forecast emissions of the covered sectors in that year. The total number of allowances Ontario makes available to emitters is to decrease by about 4% each year to encourage emitters to reduce their emissions.

However, because Ontario is planning to link its cap-and-trade system with Quebec and California, Ontario emitters will actually have access to purchase significantly more allowances than the Ontario government releases. In fact, all three jurisdictions' individual caps will be combined to create an overall cap, as outlined in **Figure 7**.

Consequently, a jurisdiction can exceed its own cap as long as the total emissions in the linked system do not exceed the overall cap. For example, Ontario's 2018 cap is 136 million allowances (for 136 Mt of emissions); however, actual Ontario emissions can exceed 136 Mt as long as emitters here purchase enough allowances from either Quebec or California to cover their emissions.

Price of Allowances and Government Revenue

Governments generate revenue from the sale of allowances at auction, where price is expected to be influenced by demand by emitters and supply of allowances. To provide some stability, the three jurisdictions set a minimum price at each auction. In 2016, the minimum was close to $17 per allowance, and it is scheduled to increase by 5% plus inflation each year until 2020.

However, at times, the price may drop below this level outside of auctions; for example, emitters may trade allowances directly with one another at prices lower than the minimum set by the three jurisdictions.

The Ministry has estimated Ontario's cap-and-trade system will generate about $8 billion in government revenue from 2017 to 2020. It has indicated that it expects most of this to come from auctions of Ontario's allowances, primarily to fuel distributors.

Figure 6: Mandatory and Voluntary Participants in Ontario's Cap-and-Trade System

Prepared by the Office of the Auditor General of Ontario

Participants	Emission Threshold	Free Allowances
Industry	**Mandatory:**[1] >25,000 tonnes of emissions per year **Voluntary:**[3] 10,000-25,000 tonnes per year	**2017:** Free allowances for 100% of combustion and process emissions[2] **2018:** Free allowances for 95% of combustion and 100% of process emissions[2] **2019:** Free allowances for 91% of combustion and 100% of process emissions[2] **2020:** Free allowances for 87% of combustion and 100% of process emissions[2]
Institutions	**Mandatory:**[1] >25,000 tonnes of emissions per year **Voluntary:**[3] 10,000-25,000 tonnes per year	Free allowances for 100% of all emissions until 2020
Energy-from-Waste Facilities	**Mandatory:**[1] >25,000 tonnes of emissions per year **Voluntary:**[3] 10,000-25,000 tonnes per year	Free allowances for 100% of all emissions until 2020
Fuel Distributors	**Mandatory:**[1] >200 litres of fuel per year	No free allowances
Electricity from Other Jurisdictions[4]	**Mandatory:**[1] All	No free allowances
Non-participants: Smaller businesses and Ontario households will not participate directly in cap and trade. However, gas and electricity distributors that participate will pass on the full carbon price to households and businesses, for example, in the form of a higher price for gas in the hope that small businesses and households in Ontario will alter behaviour resulting in a reduction in emissions.		

1. Mandatory participants are required to obtain allowances equal to emissions.
2. For more information on combustion and process emissions, refer to **Appendix 1**.
3. Voluntary participants can choose to obtain allowances equal to emissions. If they opt out, they will not receive free allowances and will pay the higher price passed on by fuel distributors.
4. Electricity sold to Ontario is charged for fossil fuels burned to create the electricity. In 2015, Ontario imported 5.8 TWh and exported 22.6 TWh of electricity.

Figure 7: Caps for the Three Linked Jurisdictions

Sources of data: California Air Resource Board; Quebec's Ministry of Sustainable Development, Environment and the Fight Against Climate Change; and Ontario's Ministry of the Environment and Climate Change

	California		Quebec		Ontario		Overall	
	Cap[1] (A)	**% Decrease[2]**	**Cap[1] (B)**	**% Decrease[2]**	**Cap[1] (C)**	**% Decrease[2]**	**Cap[1] (A+B+C)**	**% Decrease[2]**
2017	370.04	–	61.08	–	142.33	–	573.81	–
2018	358.30	3.2	58.96	3.5	136.44	4.1	553.70	3.4
2019	346.30	3.3	56.85	3.6	130.56	4.3	533.71	3.6
2020	334.20	3.5	54.74	3.7	124.67	4.5	513.61	3.8

1. Cap is the total allowances made available, with one allowance per tonne of CO_2 (or CO_2 equivalent) emitted.
2. % decrease is the percentage by which the cap is lower than the year before.

2.2.3 Adaptation in Ontario

In 2011, the Ministry released *Climate Ready: Ontario's Adaptation Strategy and Action Plan, 2011–2014* (Plan), produced in response to the 2009 report of Ontario's Expert Panel on Climate Change Adaptation. The Plan concluded that:

- the greatest risk from climate change to Southern Ontario is from flooding caused by increases in storm frequency and severity; and
- the greatest risk from climate change to Northern Ontario is a high degree of warming that will reduce the availability of ice roads to remote communities, and melting of the permafrost, which will affect water and sewage lines, and damage local ecosystems.

Figure 8 outlines the action items in the Plan.

2.2.4 Ministry Organization and Key Activities

The Ministry spent about $13 million on climate-change activities in the 2015/16 fiscal year. The Climate Change and Environmental Policy Division is the key division for climate change within the Ministry, and it has 144 full-time staff.

Three branches within this Division, collectively referred to as the Climate Change Directorate, were designated in 2014 to co-ordinate mitigation activities. They are:

- the Air Policy Instruments and Program Design Branch, responsible for the design of Ontario's cap-and-trade program as well as greenhouse-gas modelling;

Figure 8: Status of Action Items Contained in *Climate Ready: Climate Change Adaptation Strategy and Action Plan, 2011–2014*

Source of data: Compiled by the Office of the Auditor General of Ontario

Ontario's 2011 Climate Change Adaptation Strategy and Action Plan contained a number of action items spread across the government. The table below shows the title of each action item as contained in the Plan along with the current status (as of August 2016).

Item	Action Item	Primary Ministry Responsible	Status as of August 2016
1	Require consideration of climate change in existing and new policies and programs	Environment and Climate Change	Some parts completed
2	Establish a Climate Change Directorate	Environment and Climate Change	Completed
3	Promote Water Conservation	Environment and Climate Change	Some parts completed
4	Review the Ontario Low Water Response Program	Natural Resources and Forestry	Little progress made
5	Consider Climate Change Impacts in the Building Code	Municipal Affairs and Housing	Some parts completed
6	Undertake Infrastructure Vulnerability Assessments	Economic Development, Employment and Infrastructure	Some parts completed
7	Build Climate Change Adaptation into Ontario's 10-Year Infrastructure Plan	Economic Development, Employment and Infrastructure	Little progress made
8	Integrate Climate Change Impacts into the Environmental Assessment Process	Environment and Climate Change	Little progress made
9	Integrate Adaptive Solutions into Drinking Water Management	Environment and Climate Change	Little progress made
10	Develop Guidance for Stormwater Management	Environment and Climate Change	Little progress made
11	Strengthen the Winter Road Network	Northern Development and Mines	Little progress made
12	Protect Animal Health	Agriculture, Food and Rural Affairs	Some parts completed

Item	Action Item	Primary Ministry Responsible	Status as of August 2016
13	Protect Plant Health	Agriculture, Food and Rural Affairs	Some parts completed
14	Encourage Business Risk-Management Approaches	Agriculture, Food and Rural Affairs	Some parts completed
15	Pilot Adaptation Strategies in the Tourism Sector	Tourism, Culture and Sport	Little progress made
16	Conserve biodiversity and support resilient ecosystems	Natural Resources and Forestry	Little progress made
17	Undertake forest adaptation assessment	Natural Resources and Forestry	Some parts completed
18	Build adaptation into the Great Lakes Agreements	Environment and Climate Change	Completed
19	Examine Climate Change impacts on Fisheries	Natural Resources and Forestry	Completed
20	Develop the Lake Simcoe Adaptation Strategy	Environment and Climate Change	Little progress made
21	Increase Awareness of Land Use Planning Tools	Municipal Affairs and Housing	Little progress made
22	Integrate Adaptation Policies into the Provincial Policy Statement (which is a change to a policy alone)	Municipal Affairs and Housing	Completed
23	Consider Climate Change in the Growth Plan for Northern Ontario	Northern Development and Mines	Completed
24	Raise Awareness about Health Hazards of Climate Change	Health and Long-Term Care	Completed
25	Raise Public Awareness of Lyme Disease	Health and Long-Term Care	Some parts completed
26	Update Intensity-Duration-Frequency Curves	Transportation	Completed
27	Update the Environmental Farm Plan Program	Agriculture, Food and Rural Affairs	Completed
28	Provide Community Outreach and Training	Natural Resources and Forestry	Little progress made
29	Develop the Far North Land Use Strategy	Natural Resources and Forestry	Little progress made
30	Incorporate Climate Change into Curriculum	Education	Some parts completed
31	Enhance Climate-Related Monitoring	Natural Resources and Forestry	Little progress made
32	Undertake Climate Impact Indicators Study	Environment and Climate Change	No parts completed
33	Undertake Research Partnerships for Climate Modelling (the Plan has specific partnerships to be undertaken)	Environment and Climate Change	Completed
34	Establish an Ontario Public Service Climate Modelling Collaborative	Environment and Climate Change	Little progress made
35	Establish and Lead Ontario's Regional Adaptation Collaborative	Environment and Climate Change	Completed
36	Work with Canadian Council of Ministers of the Environment and Canadian Council of Forest Ministers	Environment and Climate Change	Completed
37	Participate in the Territorial Approach to Climate Change	Environment and Climate Change	Some parts completed

- the Air Policy and Climate Change Branch, responsible for the development of the Climate Change Strategy and Action Plans; and
- the Partnerships Branch, responsible for partnerships between the Ministry and external organizations related to climate change.

Other branches in the Division are responsible for climate-change adaptation efforts, supporting intergovernmental agreements on climate change, and managing non-hazardous-waste-related greenhouse-gas emissions.

Under the *Environmental Assessment Act* (Act), the Ministry's Operations Division is responsible for overseeing environmental assessments for government projects subject to the Act, many of which can have a direct impact on greenhouse-gas emissions. **Appendix 6** provides more information on how environmental assessments relate to climate change.

Under the *Environmental Protection Act*, the Ministry is also responsible for ensuring that emitters have environmental approvals in order to release emissions into the air from public- or private-sector projects, and that these do not exceed allowable limits; however, greenhouse-gas emissions are not specifically considered under the environmental approvals process. **Appendix 6** provides more information on environmental approvals.

Although various other ministries and government agencies engage in climate-change-related projects, the Ministry does not systematically track these activities, and so could not provide an estimate of total government spending on climate change.

Most programs that we identified in the course of our audit that reduce greenhouse gases were not created primarily for this reason. For example, the original goal of closing coal-fired electricity-generating plants was to improve air quality, and the primary goal of major transit projects is to reduce traffic congestion. In most cases, greenhouse-gas-emissions reduction was a secondary goal. Our audit indicated very few government programs are established with a primary goal of reducing greenhouse gases. Other than cap and trade, the only two such programs we identified were:

- Landfill Gas Collection: Regulations under the *Environmental Protection Act* require all large landfills over 1.5 million cubic metres to have processes to capture landfill gas created by the decomposition of organics. In 2014, such systems collected nearly 3 Mt of carbon dioxide equivalents in methane gas.
- Electric Vehicle Incentive Program: This voluntary program subsidizes the cost of an eligible electric vehicle as well as the installation of equipment needed to properly charge the vehicles at homes. As of October 2016, vehicles subsidized represented 0.018 Mt of annual greenhouse-gas reductions.

3.0 Audit Objective and Scope

Our audit objective was to assess whether:

- the Ministry of the Environment and Climate Change (Ministry) has effective systems and processes in place to ensure efforts to mitigate greenhouse gases are sufficient, comprehensive, and co-ordinated, and are undertaken and assessed using accurate and timely information;
- relevant government programs have integrated climate-change mitigation and adaptation plans and actions, where relevant, and are assessed to ensure achievement of appropriate results on an ongoing basis; and
- a climate-change strategy is developed and followed for achieving short- , medium- and long-term mitigation and adaptation goals.

Senior management at the Ministry agreed to our audit objective and criteria.

Our audit work was conducted primarily at the Ministry's offices in Toronto from December 2015 to June 2016. We focused on implementation of past and current mitigation and adaptation climate-change plans and on evaluating challenges in implementing them, and also the upcoming cap-and-trade system set to start in 2017 that is part of the province's 2016 Climate Change Action Plan.

We reviewed documentation at the Ministry from 2006 to 2016 relating to climate change, and contracted a national survey company to ask natural gas ratepayers their views about including the cost of cap and trade on their gas bills.

As climate change is a broad topic involving many ministries within government, we interviewed representatives from the ministries of Economic Development and Growth; Education; Energy; Finance; Housing; Municipal Affairs; Indigenous Relations and Reconciliation; Infrastructure; Natural Resources and Forestry; Northern Development and Mines; Research and Innovation; Tourism, Culture and Sport; and Transportation. We also researched climate-change mitigation and adaptation strategies, including international, federal and other provinces' practices.

In addition, we met with other provincial bodies, including the Independent Electricity System Operator, Infrastructure Ontario, the Ontario Energy Board, Treasury Board Secretariat, Waste Diversion Ontario, and former members of the Climate Change Secretariat, dismantled in 2011.

We also spoke to such organizations as the Association of Municipalities of Ontario, the California State Air Resource Board (a state agency generally equivalent to Ontario's Ministry of the Environment and Climate Change), the City of Toronto, Environment and Climate Change Canada, the Institute for Catastrophic Loss Reduction, the Insurance Bureau of Canada, the Ontario Chamber of Commerce, CFIB (Canadian Federation of Independent Businesses), the C.D. Howe Institute, and the Ontario Waste Management Association.

We also engaged two experts in the field of climate change to guide us in conducting this audit.

We also reviewed reports of the Environmental Commissioner of Ontario, and relied upon these where applicable. While the Office of the Auditor General of Ontario has a mandate to assess whether public money has been spent with due regard for economy and efficiency, and whether appropriate procedures were in place to measure and report on program effectiveness, the Environmental Commissioner is responsible for reviewing and reporting on the government's compliance with the *Environmental Bill of Rights*. Such reporting includes reviewing whether ministries consult the public regarding environmentally significant project proposals, which is required under the *Environmental Bill of Rights*, and whether government decision-making considers the environment. Also, the Commissioner has been responsible for reporting on the government's progress on reducing greenhouse gases since 2009.

The province has announced its intentions to link with Quebec's and California's cap-and-trade systems in 2018, but, at the time of our audit, had not finalized formal linking agreements. The Ministry had also not finalized the design of Ontario's cap-and-trade system beyond 2020 and told us that its estimates and projections related to the impact of cap and trade beyond 2020 were very preliminary.

This audit is part of a collaborative audit with the Office of the Auditor General of Canada and most provincial legislative audit offices across Canada that has as its central goal to determine the extent to which federal, provincial and territorial governments in Canada are meeting commitments to reduce greenhouse-gas emissions and adapt to climate change. The collaborative report is expected to be tabled in 2017.

Subsequent to the end of our field work, in October 2016, the federal government announced its intention to implement a minimum national carbon price, starting in 2018. All provinces and territories will be required to implement some type of carbon pricing system. The federal proposal was preliminary at the time of the completion of our audit, and further details were still needed to fully assess the impact of this new federal policy on Ontario's projected emissions reductions.

4.0 Detailed Audit Observations

Mitigation

The Ministry of the Environment and Climate Change (Ministry) is the lead on the government's efforts to reduce greenhouse gases, which are referred to as mitigation activities. According to the Ministry, a cornerstone of these activities is the cap-and-trade program, which is to commence in 2017. **Sections 4.1** to **4.6** address the Ministry's mitigation activities.

4.1 Recent Global Initiatives May Force Ministry to Refine Targets

Figure 9 compares Ontario's targets for reducing greenhouse-gas emissions to those of other Canadian provinces. It shows that British Columbia's 2020 target and Quebec's 2020 and 2030 targets require proportionately larger reductions than Ontario.

According to the Ministry, Ontario's targets were established in 2007 to be consistent with the principles of the Kyoto Protocol, an international agreement linked to the United Nations Framework Convention on Climate Change, which came into force in 2005.

Under Kyoto, Canada, Europe and 36 other industrialized countries committed to reduce greenhouse-gas emissions by at least 5% below 1990 levels between 2008 and 2012 (the first commitment period), and by at least 18% below 1990 levels between 2013 and 2020 (the second commitment period). Canada withdrew from Kyoto in 2011.

In October 2016, 192 countries, including Canada, signed the Paris Agreement, also within the United Nations Framework Convention on Climate Change, which commits them to "holding the increase in the global average temperature to well below 2°C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5°C above pre-industrial levels, recognizing that this would significantly reduce the risks and impacts of climate change."

Consistent with the goals of the Paris Agreement, the Canadian government has indicated it will review its national target, provide targeted funding, and ensure that provinces and territories have

Figure 9: Percentage Difference Between Target Emissions for Each Year and 1990 Emissions

Prepared by Office of the Auditor General of Ontario

	2014	2020	2030	2050
Quebec	−6	−20	−37.5	−80 to −90
British Columbia	+6[1]	−19	n/a	−76
Ontario	**−6**	**−15**	**−37**	**−80**
New Brunswick	n/a	−10	−35 to −45	−65 to −79
Newfoundland and Labrador	n/a	−10	−35 to −45	−74 to −85
Nova Scotia	−4	−10	−35 to −45	−80
PEI[2]	n/a	−10	−35 to −45	−74 to −84
Manitoba	−6	−6	n/a	n/a
Canada	+1	+1	−15	n/a
Saskatchewan	n/a	+22[1]	n/a	n/a
Alberta[3]	–	+49[1]	n/a	–

Note: n/a in the figure means no target has been set for the year indicated.

1. Due to the comparison of targets against the 1990 baseline, some of the provincial and federal targets are shown here as a positive number, representing an increase in targeted emissions compared to 1990 levels.
2. PEI uses an "Atlantic Canada" target.
3. Alberta's target is based on reducing emissions below its current 2020 forecast.

the flexibility to design their own carbon pricing. Meeting such a new national target will depend on emissions reductions by the provinces and territories, although the provinces and territories are not legally required to establish targets in line with the federal ones. In fact, Ontario's *Climate Change Mitigation and Low-carbon Economy Act, 2016* (Act) indicates that reduction targets may be increased to be consistent with the United Nations Framework Convention on Climate Change.

RECOMMENDATION 1

To ensure Ontario's targets are aligned with those of the federal government, the Ministry of the Environment and Climate Change should:

- co-ordinate with the federal government regarding impacts of the federal targets on key policies and programs in Ontario; and
- ensure any process for revising targets considers the impacts on and interests of Ontarians.

MINISTRY RESPONSE

The Ministry agrees with the Auditor General's recommendation. Ontario recognizes the federal government has a crucial role to play fighting climate change.

Ontario will continue to work with Canada and the other provinces/territories on the pan-Canadian framework and will continue to advocate for federal support to Ontario in addressing climate change.

Ontario's legislated target exceeds Canada's current international climate change commitment. We will continue to monitor national and international developments to ensure we remain a leader in the fight against climate change.

4.2 Coal Plants Closing and Recession Main Contributors to Achievement of Ontario's 2014 Reduction Target

As noted in **Figure 2**, Environment and Climate Change Canada determined that Ontario emitted 170 Mt of greenhouse gases in 2014 (the latest year for which figures are available). Based on this data, Ontario met its 2014 target of reducing emissions by 6% below 1990 levels.

According to Ontario's Climate Change Update 2014 (Update), total emissions in Ontario declined by 34 Mt between 2007 and 2014, with the greatest reductions in the electricity and industrial sectors.

Much of the 34-Mt decrease was attributable to the government acting on its 2003 commitment to close all of Ontario's coal-fired electricity-generating plants. The government decommissioned the plants between 2005 and 2014, resulting in a significant decrease in greenhouse-gas emissions.

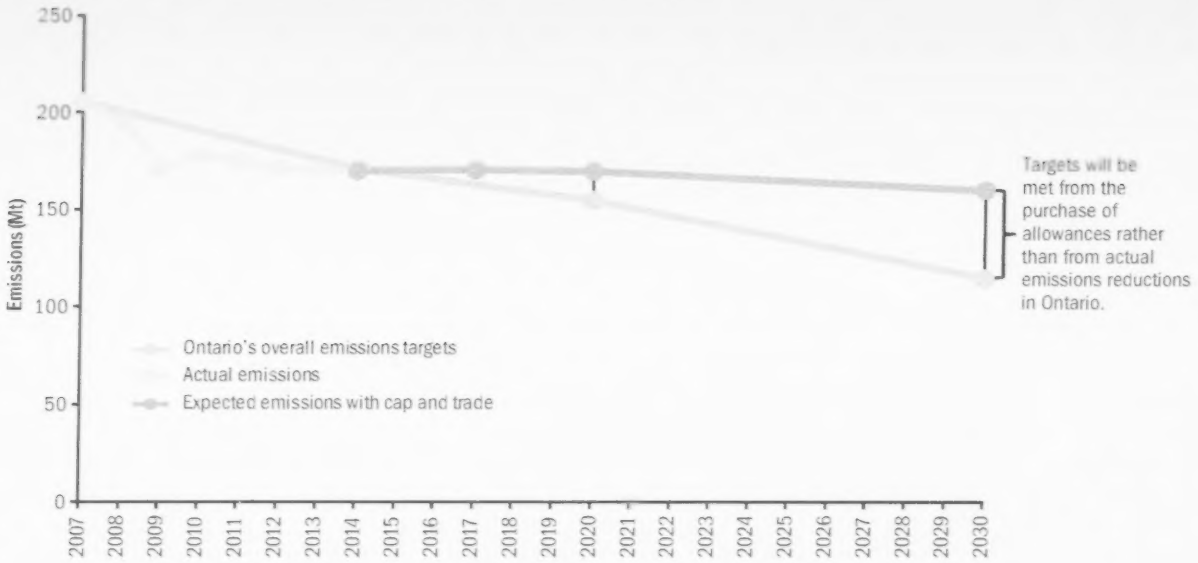
In addition, the 2008 financial crisis that sparked a recession in Ontario also indirectly helped the province meet its target; the Update attributes 10 Mt of the 34-Mt decrease to plants reducing production or closing altogether between 2007 and 2012. See **Figure 10** for actual and projected greenhouse-gas emissions by year.

As of the 2007/08 fiscal year, the Ministry committed to report annually on emissions levels and its plans regarding future efforts to cut emissions. However, it was under no legal obligation to do so, and in fact issued no such reports in 2011 and 2013.

Although the Ministry's 2007 Mitigation Plan outlined specific initiatives to reduce emissions, as seen in **Figure 3**, its annual reporting does not link changes in emissions to individual initiatives, making it difficult to evaluate the outcome of those initiatives. The Environmental Commissioner has already commented in its 2013 report on the Ministry's delays in producing annual reports and the lack of detailed explanations in the reports on actions taken by the Ministry to reduce greenhouse gases. (For more information on the Environmental Commissioner, see **Appendix 7**.)

Figure 10: Ontario's Emission Targets Compared to Expected Emissions

Source of data: Ministry of the Environment and Climate Change's environmental consultant



RECOMMENDATION 2

To keep Ontarians updated on the status of its efforts to reduce greenhouse gases, the Ministry of the Environment and Climate Change should:

- report at least annually to the public on its overall progress toward meeting its emissions targets; and
- explain the outcomes of its specific initiatives to reduce emissions.

MINISTRY RESPONSE

The Ministry recognizes the importance of keeping Ontarians informed of the status of the government's efforts to reduce greenhouse-gas emissions. The Ministry has already established the requirement for annual reporting under the *Climate Change and Low Carbon Economy Act, 2016*.

The Minister of the Environment and Climate Change is also required by the Act to review and provide an evaluation to Treasury Board of any initiative proposed to be funded through the Greenhouse Gas Reduction Fund, and report annually on evaluations and the status of the funded initiatives set out in the Climate Change Action Plan. This status will include the emissions reductions achieved from the initiatives.

4.3 Ontario Cap and Trade Will Not Significantly Lower Actual Emissions up to 2020

Under its plans to link its cap-and-trade system with Quebec and California, Ontario is expected to achieve only a relatively small reduction in actual emissions within Ontario from implementation through to 2020. However, the Ministry intends to count in its own emissions totals some of the reductions achieved in the two other jurisdictions.

The Ministry did limited analysis of alternative approaches prior to selecting a cap-and-trade system linked to Quebec and California in 2008 as a means of reducing emissions in Ontario.

In May 2016, the Ministry received and made public an economic analysis of alternatives from its environmental consultant, entitled *Impact Modelling and Analysis of Ontario Cap and Trade Program*. This analysis supported the choice of its linked cap-and-trade system. However, the analysis was produced about eight years after Ontario signed a memorandum of understanding for a linked cap-and-trade system, and just a day before it gave Royal Assent to supporting legislation (the *Climate Change Mitigation and Low-carbon Economy Act, 2016*).

The analysis compared four possible approaches, one of which was the linked cap-and-trade model that Ontario chose. The others were an Ontario-only cap-and-trade system, and two carbon-tax models in which businesses and consumers are directly taxed based on the quantity of emissions they produce. **Figure 11** shows the projected economic impact of each of the four options, along with the forecast emissions reductions.

In order for Ontario to meet its 2020 target of 155 Mt, the Ministry needs to find ways to reduce emissions, because its current projections indicate the province will be 18.7 Mt over target. The current plan is to rely on cap and trade, and other measures funded from cap-and-trade revenues, to close this 18.7 Mt gap.

However, as seen in **Figure 11**, the analysis commissioned by the Ministry forecast that of the required 18.7 Mt, only about 3.8 Mt in actual reductions is expected to be achieved in Ontario—the remaining 15 Mt is expected to be achieved in Quebec and California.

The analysis commissioned by the Ministry indicates that, up until 2020, Ontario businesses will, for the most part, buy allowances from California and/or Quebec instead of making changes such as installing new equipment. The Ministry intends to include these purchased allowances in the tally to help it meet the Ontario target. The Ministry has not determined details of the cap-and-trade program after 2020.

The analysis indicates that the price of an allowance in 2020 would have varied extensively depending on which cap-and-trade system was chosen:

Figure 11: Relative Impact of Carbon Pricing Options on Emissions Reductions in 2020 According to Study Commissioned by the Ministry

Source of data: May 2016 Report commissioned by the Ministry of the Environment and Climate Change

Options	Emissions Reduction Projected to be Needed in 2020 to Meet Ontario's Target (Mt) A	Allowances Purchased from California and/or Quebec (Mt) B*	Emissions Reduction due to Businesses Leaving Ontario (Mt) C	Actual Emissions Reductions (Mt) A–B–C	Economic Impact as % of GDP	Allowance Price per Tonne to be Paid by Emitters ($)
Considered in Study						
Model chosen: Linked Cap and Trade, funding received spent on reduction initiatives	18.70	14.90	0.28	**3.52**	(0.03)	18
Unlinked Cap and Trade, funding received spent on reduction initiatives	18.70	–	1.75	**16.95**	(0.39)	157
Carbon Tax, funding received spent on reduction initiatives	18.70	–	5.84	**12.86**	(0.40)	69
Carbon Tax, funding received returned as tax cuts	18.70	–	6.04	**12.66**	(0.21)	72

* May also include offsets.

- Under the current linked system, an allowance is projected to cost $18 per tonne of emissions.
- In an unlinked Ontario-only system, the price was projected to be $157 per tonne, or almost nine times more.

The two systems have such a significant price variance because the number of allowances available for sale from an only Ontario system would be much smaller than the linked system, where a larger number of allowances would be available from the two other jurisdictions.

The analysis also noted that in an Ontario-only, unlinked cap-and-trade system, actual reductions in greenhouse gases in the province in 2020 would close the projected gap in emissions mentioned above—that is, they would be almost 18.7 Mt versus 3.8 Mt, or almost five times higher than in a linked system.

However, the analysis further pointed out that more businesses might leave the province in an Ontario-only system because the cost of doing business would be considerably more as a result of the higher-priced allowances ($157 per tonne versus $18 per tonne).

The higher price of allowances would make it more expensive for businesses to produce emissions. Businesses can choose to either obtain allowances equal to their emissions; invest in the technologies needed to reduce their actual emissions; reduce production to lower their emissions; or leave the province.

Businesses leaving Ontario, combined with the higher cost to all consumers of fossil fuels such as gasoline and natural gas, would have a more significant negative impact on the province's GDP (the gross domestic product, a measure of all goods and services produced in the province) under the unlinked system.

The Ministry justified its choice of the linked cap-and-trade system by saying this option had the least onerous impact, claiming that the linked model offers the benefits of greater actual emissions reductions while avoiding high economic costs.

4.3.1 Ontario Businesses to Pay $466 Million for Quebec and California Allowances in Linked Cap and Trade

The Ministry's analysis also indicates that under the linked cap-and-trade system, many Ontario businesses are initially more likely to buy allowances—almost 15 Mt worth in 2020—rather than pay for the more expensive equipment needed to actually reduce emissions.

Based on estimates of the number of allowances required from outside Ontario, and the forecast prices, Ontario businesses will pay approximately $466 million for Quebec and California allowances by the end of 2020, money that will leave the Ontario economy. Based on early forecasts in 2015 used to inform program design, the Ministry estimated this could rise to $2.2 billion in 2030. However, if initiatives outlined in the Government's Climate Change Action Plan are successful at reducing emissions over the long term, this number may be lower.

In addition, the allowances sold by the government of Ontario are forecast to raise about $8 billion over the four years.

The Ministry estimates households are expected to face an average increase in direct yearly costs (of fossil fuels) of $156 ($13 per month) in 2017. Preliminary estimates by the Ministry of Finance have estimated the direct costs to the average Ontario household in 2019 will be $210, plus an additional $75 in indirect costs (e.g., goods and services). The Ministry has not determined the specific impact of cap and trade on rural and Northern households.

4.3.2 Ontario's Emissions Reporting Will Not Follow Federal Rules

As noted above, the main benefit of the plan to link with Quebec and California is the Ministry's assertion that it will meet the 2020 target. However, the Ministry has not publicly said that it intends to achieve Ontario's target by counting reductions achieved in its partner jurisdictions.

Furthermore, since the final determination of whether Ontario has met a given target is based primarily on the National Inventory Report (NIR) prepared by the federal government (see **Section 2.1.1**), Ontario will likely be assessed as not meeting its target, since the NIR does not currently recognize reductions made outside Ontario, such as those from Quebec and California. In addition, while the 2015 Paris Agreement allows one country to claim another's emissions reductions, this is permitted only if both federal governments have formally agreed to such an exchange. Canada at present has no such agreement with the United States. Consequently, if Ontario claims reductions made in California, currently these would not be eligible for inclusion in the NIR reporting.

Finally, the provincial government has not clearly communicated to the public in its 2015 Climate Change Strategy or its 2016 Climate Change Action Plan its intention to use other jurisdictions' emissions reductions to meet Ontario targets.

RECOMMENDATION 3

To ensure Ontarians receive a complete picture of the province's emissions reductions, the Ministry of the Environment and Climate Change should report publicly on:

- the short- and long-term financial impacts of cap and trade on Ontarians; and
- both the projected and actual reductions for its 2020 and other targets, in accordance with the reporting requirements of the Canadian National Inventory Report.

MINISTRY RESPONSE

The Ministry agrees with the Auditor General that public reporting on progress toward greenhouse-gas emissions reductions is a critical element related to accountability and transparency of climate change initiatives. A key element of the *Climate Change Mitigation and Low-carbon Economy Act, 2016* is the requirement for an annual report on implementation of the Climate Change Action Plan and the use of cap-and-trade proceeds to support emissions reductions. As part of this reporting, we will also include the short-and long-term financial impacts of cap and trade on Ontarians.

Cap and trade is an internationally recognized system for reducing greenhouse-gas emissions. The recently ratified Paris Agreement includes provisions for internationally transferred mitigation outcomes, which is a recognition that national jurisdictions may voluntarily participate in emissions trading and that national reporting frameworks need to account for such trading.

The Ministry will ensure it continues to report historical emissions in accordance with the Canadian National Inventory Report (NIR) and with the United Nations Framework Convention on Climate Change's guidelines and practices for this purpose. The Ministry intends to also separately report on progress on mitigation commitments, apart from the NIR, and recognize allowances from other jurisdictions as the NIR currently only recognizes domestic reductions. Ontario will be working closely with its partners in Québec and California on how progress under a linked cap-and-trade program will be communicated.

Ontario also continues to work closely with the federal government on a national approach to pricing carbon emissions through the development of a pan-Canadian framework that aligns with the Paris Agreement on global climate change action.

4.3.3 Ontario Linking with Quebec and California May Not Significantly Reduce Global Emissions in 2020

The Ministry's economic analysis of cap and trade indicates that linking with Quebec and California is a reasonable climate-change strategy because it will ultimately yield lower global emissions. The

Ministry told us it assumes businesses in Quebec and California will further reduce their emissions in order to sell allowances to Ontario companies.

However, this assumption is questionable based on current allowance trading information. This information indicates that well over the 14.9 Mt of allowances that will be needed by Ontario companies are already available—over a year in advance of Ontario entering the linked cap-and-trade system. According to trade data from the California Air Resource Board (a California government board responsible for cap and trade), Quebec and California had more allowances available for sale at auction as of August 2016 than were sold. Only 32% of allowances available in the most recent quarterly auction in August 2016 were sold, and over 60 Mt of allowances went unsold.

In addition, during several months in 2016, the price of allowances traded between emitters themselves had fallen below the minimum auction price set by the governments.

There are two primary reasons why an oversupply of allowances may occur: either a jurisdiction releases more allowances than are needed to cover actual emissions, or other government policies force emissions reductions, resulting in emitters not needing as many allowances.

The experience of the European Union Emissions Trading System (EU ETS) has also shown that when there is an oversupply of allowances, the price falls and the incentive for businesses to reduce emissions also decreases. The EU ETS includes 28 European Union states plus Iceland, Lichtenstein and Norway, and covers around 45% of the EU's emissions.

Between 2008 and 2012, participating governments provided close to 90% of allowances for free, and auctioned the remaining 10%. This was against the background of the 2008 economic crisis, which reduced the demand for allowances.

A collaborative audit by the European Organization of Supreme Audit Institutions in 2012 found that a surplus of inexpensive allowances provided little incentive to businesses to make actual long-term emissions reductions. Reports by the European Parliament and European Commission (the executive branch of the European Union) indicate the surplus had reached 955 million allowances (or the right to emit 955 Mt of emissions), and the price of allowances had fallen from €30 per tonne in 2008 to €3 per tonne in 2013. Part of the reason for the steep decline in the price was the EU ETS did not establish a minimum allowance price for auctions, such as has been established in Ontario.

The ongoing emission-reduction strategies of California especially indicate its reductions may have occurred regardless of whether Ontario was part of the linked cap-and-trade system. For example, California has a number of initiatives to reduce emissions in addition to cap and trade, including standards for low-carbon fuel, vehicle emissions, and renewable electricity. In fact, California's 2014 climate change plan forecasts that 70% of reductions required to achieve its 2020 goal will be achieved through initiatives other than cap and trade.

RECOMMENDATION 4

To ensure that it adopts the best possible greenhouse-gas-reducing system, the Ministry of the Environment and Climate Change should better study the emissions impact of Ontario joining a linked cap-and-trade system to confirm that Ontario's participation is contributing to additional global emissions reductions.

MINISTRY RESPONSE

The best possible greenhouse-gas-reducing program is one that achieves the greatest level of emissions reductions at the lowest cost. A linked cap-and-trade program allows Ontario to achieve its emissions reduction commitments of 18.7 Mt at a substantially lower cost than an unlinked or carbon tax program.

Ontario has conducted evaluations of the benefits of the linked cap-and-trade program on actual emissions reductions in Ontario and potential linking partnerships, and will continue

to study the impacts of the program in emission reductions. We are moving forward with plans to join Quebec and California by linking the cap-and-trade programs in 2018. Pursuing other appropriate linkages will continue to be actively investigated and assessed.

Modelling of alternative programs, such as unlinked cap and trade or carbon tax, showed that the costs of an unlinked Ontario program to households and businesses would be far greater than a linked program, which achieves similar environmental benefits. It also suggests broader linkages with other jurisdictions could further improve outcomes.

4.3.4 Allowances May Be in Short Supply by 2030

While market forecasts suggest that emissions in 2020 for Ontario, Quebec and California are expected to be easily covered by the number of allowances available in 2020, this situation is expected to change in 2030. All three jurisdictions have set targets for much greater emissions reductions in 2030 and are planning to release fewer allowances to ensure their targets are achieved. Consequently, allowance shortages are expected.

4.3.5 Unresolved Issues Remain with Ontario's Cap-and-Trade System

Emissions Reductions May Be Used in Multiple Jurisdictions' Emissions Reporting

WCI, Inc. has an allowance tracking system that is to ensure that each allowance is claimed only once by emitters. However, Ontario, Quebec and California have not formally agreed on how to account for and present the reductions resulting from cap and trade in their own jurisdictional emissions reporting. As a result, there is a risk that two jurisdictions will take credit for one instance of reduction: the jurisdiction that actually made the reduction, and the jurisdiction that bought the allowance.

For example, if a company in California has an allowance available for sale because it reduced its emissions and so does not need it, California may take credit for the reduction in its reporting. When an Ontario company buys the allowance from the California company, Ontario may, under current plans, also take credit, counting the allowance toward its target.

Our review of California's emissions reporting and the current agreement between Quebec and California also indicates that these two jurisdictions have not resolved how to account for allowances sold by one jurisdiction to the other in jurisdictional emissions reporting.

As of June 2016, no mechanism had been put in place to prevent the double reporting of emissions reductions from the buying and selling of allowances among the three jurisdictions.

Method of Measuring the Impacts of Offsets Not Yet Established

Ontario's cap-and-trade system allows for up to 8% of emissions from large emitters to be covered by "offset allowances." Offset allowances are emissions-reducing projects, such as planting trees and collecting landfill gases (refer to **Appendix 5** for more details on offsets in Ontario's cap-and-trade program).

However, in practice, the emissions-reducing impacts of such projects may be difficult to measure and verify. For example, it may be hard to confirm the extent to which a new-growth forest absorbs greenhouse gases.

The Office of the Auditor General of British Columbia raised concerns about the lack of information to adequately assess offsets in a 2013 report entitled *An Audit of Carbon Neutral Government*. The report noted that the regulation setting out offset rules was unclear and that the British Columbia government did not provide proper oversight of the third parties responsible for validating the offsets. The report recommended the British Columbia Ministry develop guidelines to clarify the regulation. At the time of

our audit, the Ontario Ministry was in the process of developing protocols for measuring the impacts of projects resulting in offset allowances.

Ontario May Exceed Cap Due to Impact of Free Allowances for Actions Taken Prior to Cap and Trade

Under Ontario's cap-and-trade system, the Ministry plans to issue free allowances to companies for up to a total of 2 Mt worth of allowances for emissions reductions achieved between 2012 and 2016, prior to the start of cap and trade. Businesses receiving these free allowances will be able to use them in 2017 or carry them forward to any subsequent year.

In 2020, Ontario is planning to release just enough allowances to enable Ontario to meet the 2020 target (the cap). However, the Ministry has not factored these additional free allowances into its cap. The risk is that companies will now have allowances permitting them to collectively emit up to 2 Mt more than the cap.

At the time of our audit, the Ministry had not yet issued any of these allowances and was still considering how to implement this policy.

Cap and Trade Will Likely Contribute to an Increase in Electricity Prices for Industry

The Ontario Chamber of Commerce informed us that, based on its 2015 survey of 1,000 businesses, the high cost of electricity poses one of the largest competitive risks to businesses in Ontario. Under cap and trade, the price of electricity is expected to rise further.

The government is planning to use cap-and-trade revenues to offset higher electricity prices (discussed in **Section 4.4**). Using limited information on the cap-and-trade program that is currently available past 2020, the Ministry has forecast that, even with a planned $5.68 billion allotted for this offset, large industrial electricity customers will still see a 7% increase on their 2030 electricity bills directly attributable to cap and trade. This increase is over and above the planned increases in the 2013 Long-Term Energy Plan (discussed in **Section 4.4**).

RECOMMENDATION 5

To ensure the new cap-and-trade system operates consistently and fairly to achieve maximum greenhouse-gas emissions reductions in Ontario, the Ministry of the Environment and Climate Change (Ministry) should resolve outstanding matters before implementing the system. Specifically, the Ministry should:

- develop protocols for accurately measuring and verifying the impacts of projects eligible for offset allowances;
- consider the impact of the free allowances it plans to offer Ontario businesses for emissions reductions achieved before the implementation of cap and trade; and
- ensure that the same reductions are not reported by multiple jurisdictions.

MINISTRY RESPONSE

The Ministry appreciates the Auditor General's concern with the consistency and fairness of the operation of the cap-and-trade program. The Ministry is taking the following action to finalize cap-and-trade program design to ensure that the cap-and-trade program achieves maximum greenhouse-gas emissions reductions at the lowest cost, and in a fair and consistent manner when implemented in 2017:

Offsets:
Ontario will be consulting the public on a regulatory proposal for offset credits in fall 2016, which would approve the creation of offset credits based on protocols that will be adapted to meet the standards agreed to by Quebec, California and Ontario. Thirteen protocols will be adapted by early 2018. The public will have the opportunity to review and provide comments on the draft protocols.

Early Reduction Credits:
Ontario is planning to implement rules for early reduction credits in 2017. As set out in the

regulatory proposal in February 2016, Ontario would issue a limited number of early reduction credits (up to 2 Mt). These credits are to help capped emitters that took early action to mitigate greenhouse gases. Eligible projects will need to meet rigorous criteria in order to receive the credits.

Double Reporting:
With regard to greenhouse-gas reduction targets, Ontario is committed to working with California and Quebec to meet reduction targets to ensure there is no double counting in reporting of progress.

4.4 Ministry Forecasts Less Greenhouse-Gas Emissions Reduction than Its Own Action Plan Publicly Communicates

The government has said it plans to use the estimated $8 billion in revenue that cap and trade will generate by 2020 for projects to reduce greenhouse-gas emissions and to administer the cap-and-trade program. These projects, outlined in the Ministry's Climate Change Action Plan (Action Plan) of June 2016, are listed in **Figure 5**.

However, it is unlikely that these projects will actually achieve the forecast 9.8-Mt emissions reduction in 2020, which the Ministry has indicated it expects in its Action Plan, since many of the projects' estimated reductions were not supported by a thorough analysis.

The Ministry led the development of the Action Plan, working with 15 other ministries to:

- identify initiatives to help Ontario achieve its 2020 greenhouse-gas reduction target; and
- lay the foundation for future reductions.

Ministries were also asked to submit proposed projects to the Ministry outlining each project's potential for emissions reductions, implementation costs and timelines.

As seen in **Figure 5**, the Ministry expects the projects to be funded under the Action Plan to result in emissions reductions of nearly 10 Mt. However, as discussed in **Section 4.3**, the 2016 analysis titled *Impact Modelling and Analysis of Ontario Cap and Trade Program*, commissioned by the Ministry, forecasts that reductions in Ontario would only reach 3.8 Mt. The analysis included the impact on emissions of both cap and trade and the Ministry's spending of cap-and-trade revenues on initiatives similar to those considered in the Action Plan. The following are examples of projects whose estimated emissions reductions needed to be better supported:

- *Electricity price reductions will have marginal impact:* The Ministry plans to spend up to $1.32 billion between 2017 and 2020 to offset the financial impact of cap and trade on residential and commercial electricity bills, and thereby decrease emissions by 3 Mt. The Independent Electricity System Operator was able to provide us with support to show the impact of this subsidy on the average household electricity bill—which is projected to increase 23% (or $34.07 per month) from 2015 to 2020 even after applying this reduction. However, neither the Ministry of the Environment and Climate Change nor the Ministry of Energy was able to demonstrate how the $1.32 billion subsidy would result in the estimated 3 Mt reduction in emissions; the two ministries informed us they had not decided on how the subsidy would be used to achieve these reductions. In theory, lowering electricity prices should motivate a greater use of electricity over natural gas and diesel—and therefore reduce greenhouse gases. However, the impact of the $1.32 billion on electricity prices is expected to be marginal; without the subsidy, and factoring in the cost of cap and trade, residential bills are projected to rise by 25% and industrial bills by 14% by 2020; with the $1.32 billion applied, residential rates will still increase by 23% and industrial rates by 13%. Finally, such increased electricity costs may make natural gas, which is responsible

for significantly more greenhouse-gas emissions than cleaner energy sources like solar, hydro, nuclear and wind, an even more economical option.

- *No plan for achieving renewable natural gas goal:* $100 million will go toward a project to help natural gas distributors increase their use of "renewable" natural gas (methane made from the decomposition of organic material, also known as "biogas"). The Action Plan indicates this initiative will reduce emissions by 1 Mt by increasing the renewable portion of all natural gas used in the province from 0% to 2% by 2020. Our review of a 2013 report from the Biogas Association of Canada indicated that the current biogas-generation capacity is insufficient to meet this proposed demand. In fact, in order to increase the renewable portion of all natural gas distributed in Ontario to 2%, 500 times more renewable natural gas is required than what Ontario currently produces. The Action Plan does not indicate how this shortfall will be met—it just assumed a level of production of renewable natural gas from a 2011 project proposal from gas distributors that the Ontario Energy Board did not approve due to insufficient information provided by the utilities proposing the project.
- *Zero-emission home rebate initiative not supported:* Funding of $200 million will be provided to the Zero Emission Certification and Incentive Program, an initiative to provide a one-time $20,000 rebate for each house built or retrofitted to a zero-emissions standard. This is expected to achieve an annual 0.01-Mt reduction. It is assumed that 2,500 such homes will be sold each year between 2017 and 2020—as compared to about 70,000 homes built in Ontario in 2015. The initiative does not consider how much more than $20,000 homeowners will need to spend to get their home to zero emissions, and whether they will be willing to spend it. Without this information, there is no basis for projecting the sale of 2,500 such homes a year for four years.

Other concerns with the extent to which the Action Plan items would likely contribute to reductions in greenhouse gases are as follows:

- **Projects initiated before the Action Plan are now being presented as new climate-change initiatives:** The Ministry allocated $952 million for two projects (with projected emissions reductions of over 0.05 Mt in 2020) that were initiated before the Action Plan, as follows:
  - *Electric vehicles ($277 million to achieve 0.05 Mt reduction in 2020):* In 2009, the government committed to the goal of having "one in 20 passenger vehicles on the province's roads being electric by the year 2020." The government is currently falling far short of achieving this goal; as of 2016, there were only about 9,000 electric vehicles registered in Ontario compared to the 500,000 vehicles sold annually. Nevertheless, the Ministry has factored the increased use of electric cars into the impact on emissions in 2020.
  - *Regional Express Rail ($675 million to achieve reductions after 2020):* The Regional Express Rail is a component of the province's regional transportation plan for the Greater Toronto and Hamilton area. The Ministry had already factored the project into its 2014 annual public report on emissions.

Without cap-and-trade revenues, the government would have needed to either downsize the projects from the original commitments or find alternative revenue sources to fund the $952 million in project costs—since the government had committed to these projects before the introduction of the Action Plan. Including these projects in the Action Plan does not result in any additional emissions reductions.

- **Action Plan takes credit for reductions that may have occurred without subsidies:** Many initiatives in the Action Plan are geared to changing Ontarians' behaviour so that they use fewer resources that generate greenhouse gases. The initiatives offer subsidies to effect this change—but some recipients would have changed their behaviour anyway. These Action Plan initiatives do not account for the portion of the subsidy that was unnecessary to change behaviours, and therefore overstate reductions attributable to the Action Plan. For example:
  - *Energy efficiency retrofits ($900 million to achieve 0.10 Mt in 2020):* This initiative provides funding for apartment-building owners and social-housing projects to replace boilers, install adaptive thermostats and retrofit lighting. But some of these improvements would have been made even without the Action Plan because the age of the buildings would have required them.
  - *Electric vehicles ($277 million to achieve 0.05 Mt in 2020):* This funding to subsidize eligible electric vehicles and their related infrastructure was made without consideration given to the people who would have bought such vehicles even without a subsidy. For example, the initiative provides a $3,000 subsidy for an electric vehicle that retails between $75,000 and $150,000. The emissions calculation assumes that vehicles in this high cost category would have been purchased only as a result of the relatively small subsidy.

The goals of these types of initiatives are to encourage the adoption of lower-emitting technology. Some independent research organizations, in particular the C.D. Howe Institute and the Ecofiscal Commission, have published reports that conclude that using revenue generated from programs like Ontario's cap and trade to fund greenhouse-gas-reducing programs may be unnecessary, especially for sectors covered by the cap. For example, the C.D. Howe Institute suggests that merely implementing carbon pricing (e.g., cap and trade) will encourage the adoption of such technologies without additional inducements. The Institute also suggests such funding would be better spent on targeted subsidies for riskier technology research and development—that is, projects that would not be funded by the private sector.

- **Emissions reductions overstated in the Action Plan because combined effect of initiatives not considered:** The expected emissions impact as measured overall by the Ministry has been determined by measuring the impact of each project in isolation. However, some initiatives will shrink the emissions impact of others, and failing to take this into account can result in overstating total emissions reductions. For example, the building retrofit program will reduce the amount of natural gas that buildings consume, thus reducing the impact of any increased use of biogas. California government environment officials told us that the State uses software that factors in this overlapping effect when estimating the impact of emissions on various initiatives.

4.4.1 Legislation Provides Little Guidance on Eligibility of Action Plan Initiatives

As noted, many of the initiatives in the Climate Change Action Plan do not provide a sound basis for achieving the nearly 10 Mt of emissions reductions forecast by the Ministry. One reason for this is that the *Climate Change Mitigation and Low-carbon Economy Act, 2016* (Act) does not provide clear criteria for which types of projects can be funded.

The Act allows the Ministry to use cap-and-trade revenue to fund a wide range of initiatives, with the only requirement being that the initiative is reasonably likely to support the reduction of greenhouse gas.

4.4.2 Consideration of Alternative Approaches Could Identify More Cost-Effective Ways of Reducing Electricity Prices

As noted, the Climate Change Action Plan proposes to spend up to $1.32 billion of cap-and-trade revenue to reduce the price of electricity. While the Independent Electricity System Operator found that this spending would indeed help offset electricity price increases, our analysis indicated that the Action Plan's approach was not the most cost-effective.

We identified alternative approaches that could yield better outcomes. One was providing free cap-and-trade allowances to electricity generators to keep electricity costs lower, and subsidizing residential electricity bills using cap-and-trade revenue. (For more on the businesses receiving free allowances, see **Figure 6**.) The Independent Electricity System Operator performed preliminary calculations that indicated this would yield the same reductions to the cost of electricity bills but would take $500 million less out of cap-and-trade revenues than the approach in the Action Plan. However, this alternative approach was never considered by the Ministry.

RECOMMENDATION 6

The Ministry of the Environment and Climate Change should ensure that projected emissions reductions expected from the 2016 Climate Change Action Plan initiatives that it intends to fund from cap-and-trade revenues:

- are supported by sound assumptions; and that
- it selects initiatives that achieve the highest value-for-money.

MINISTRY RESPONSE

The Ministry agrees with the Auditor General's recommendation on the need for the evaluation of initiatives funded from cap-and-trade proceeds, and ensuring the best value for money of the government's climate change efforts. That is why it has put in place a rigorous evaluation framework for program proposals including refining emissions reduction forecasts prior to their approval for funding. The Minister of the Environment and Climate Change is required to review and provide an evaluation to Treasury Board of any initiative proposed to be funded through the Greenhouse Gas Reduction Fund, and report annually on evaluations and funded initiatives.

The Ministry is also committed to transparency in its decision-making and will report annually on emissions reduction progress as well as on initiatives funded from cap-and-trade proceeds.

4.5 Impact on Emissions Often Not Routinely Considered in Provincial Ministries' and Agencies' Decision-Making

Provincial government programs and activities have the potential to cause or reduce emissions. However, provincial ministries and agencies responsible for those programs and activities do not consistently consider this.

The Ministry can do more to co-ordinate emissions reductions in the programs for which it is directly responsible, such as waste diversion. It can also do more to encourage other ministries to prioritize emissions reduction. We discuss this in further detail below.

4.5.1 Ministry Has Not Improved Diversion of Non-Hazardous Waste to Reduce Emissions

The Ministry has not met its 2004 goal of diverting 60% of all non-hazardous waste; it estimates that less than 30% of non-hazardous waste in Ontario is currently being diverted. Non-hazardous waste diversion reduces greenhouse-gas emissions.

According to Environment and Climate Change Canada, about 8.5 Mt of Ontario's emissions in 2014 resulted from the decomposition of organic waste in landfills. If organic non-hazardous waste is diverted from landfills and instead composted, emissions are avoided.

Recycling also reduces greenhouse-gas emissions, albeit less directly, by reducing the need to extract the natural resources needed to manufacture new products.

The Ministry is responsible for setting standards for the management of non-hazardous waste through legislation and regulations, and enforcing compliance. Our 2010 audit noted that while there was a significant improvement in diversion for households, the industrial, commercial and institutional sector had not improved its overall diversion rates. In our 2012 follow-up, we noted that a number of our recommendations remain outstanding, and that the Ministry had not:

- developed a province-wide organics waste diversion program, which meant that in 2015, only 38% of organic waste in Ontario was being diverted; and
- improved waste diversion in the industrial, commercial and institutional sector, which is responsible for managing its own waste. The Ministry has noted that current regulations have been largely ineffective in improving waste diversion in this sector because, for example, they apply only to large businesses and do not apply to organic waste. Further, there is little economic incentive for businesses to increase waste diversion. For example, according to a recent Ministry study, in 2014 the average cost per tonne of sending organic waste to landfill was about $130, compared to about $200 for diversion in the Industrial, Commercial and Institutional sector.

In 2015, the Ministry introduced a long-term goal of zero waste and zero greenhouse-gas emissions from the waste sector. In June 2016, the government passed the *Resource Recovery and Circular Economy Act, 2016* and the *Waste Diversion Transition Act, 2016*. At the time of our audit, the Ministry could not estimate the expected waste diversion that would result from this legislation because its regulations had yet to be drafted, and the Ministry had not approved a timeline on when it planned to achieve its long-term zero waste goal.

4.5.2 Ministry Has Not Clarified How Environmental Assessments Should Incorporate Climate-Change Considerations

Under the *Environmental Assessment Act* (Act), the Ministry has the authority to set the criteria that must be considered when an environmental assessment is conducted on a proposed project or plan.

The scope of the Act is very broad, and applies to plans ranging from a new transportation corridor that includes both transit and highways for the entire province, to a single new landfill site.

Environmental assessments require an evaluation of alternatives in advance of a project or plan being implemented. The criteria to be considered when evaluating alternatives include such factors as noise, odour and impact on water quality. Before 2014, the Ministry did not require environmental assessments to consider how a particular project or plan would impact climate change. In 2014, the Ministry updated the requirements for all environmental assessments as follows: "Consideration should also be given to how the project and its alternatives may interrelate with components of the environment, including with potentially changing climatic conditions over time." The Ministry has yet to provide any additional guidance on how this requirement should be implemented, for example, by clarifying that environmental assessments should consider alternatives that have varying impacts on greenhouse-gas emissions, with one alternative being focused on minimization. Municipal staff who conduct environmental assessments on proposed projects such as roads and hydro facilities told us that the current requirements are vague and would be better supported by detailed guidance.

4.5.3 Emissions Impact Is Not Consistently Being Considered Prior to Launching Significant Projects

Ministries are not required to consider the impact of their projects or initiatives on greenhouse gases. The following are examples of provincial ministries undertaking projects or major initiatives without factoring in their impact on emissions:

- The Ministry of Transportation has recently introduced a pilot project to allow vehicles with only one passenger to use its high occupancy vehicle (HOV) lanes in exchange for paying a toll. This will likely decrease drivers' incentive to car pool, which is one of the strategies to reduce overall vehicle emissions. Our review indicated that the Ministry of Transportation has not analyzed the impact of this initiative on expected emissions.
- The Ministry of Energy can significantly influence emission levels in the electricity sector, because it decides the sources of power it will acquire. Some sources, such as hydroelectricity, produce no greenhouse gases; others, such as natural gas, produce more significant amounts. The government's 2013 Long-Term Energy Plan did not consider emissions in the province's future energy-supply mix. Currently, Ontario's electricity mix results in fewer greenhouse gases than provinces such as Alberta and Saskatchewan that use coal, but more greenhouse gases than Manitoba and Quebec that use more hydroelectricity.
- The mandate of the Ministry of Northern Development and Mines is to encourage economic development in the North. While there are clear benefits to this, the mandate may conflict with the goal of reducing emissions, because mining usually involves destruction of forests, which can absorb greenhouse gases; use of heavy equipment and machinery that can only be powered by burning fossil fuels; and on-site ore purification processes that produce greenhouse gases. At present, Ministry decisions related to mining projects do not consider the impact on emissions.
- The Ministry of Economic Development, Employment and Growth announced in April 2015 that it would provide $230 million in loans and grants to mostly northern and rural communities to connect them to the natural gas pipeline system. This initiative was intended to reduce energy bills and encourage industry to locate in remote areas. In some cases, the move could reduce greenhouse gases—6% of households in the region currently use heating oil, for example, and a switch to natural gas would mean fewer emissions. However, the 11% of households currently using electricity would, if they switched to natural gas, raise the level of emissions. As a result, this initiative may lead to long-term increases in greenhouse gases by increasing reliance on fossil fuels. By fall 2016, this Ministry had not determined the overall impact of this initiative on emissions.
- The Ministry of Finance provided $215 million in mostly diesel-fuel-tax exemptions in 2015 for home heating and the non-highway use of construction, forestry, mining and agricultural equipment. There are no current plans to introduce legislative changes to discontinue these exemptions. The Environmental Commissioner noted in a 2016 report that subsidies of fossil fuels are a barrier to reducing their use, and it conflicts with the goal of reducing greenhouse-gas emissions.

Government decision-making has historically considered only the direct financial costs of projects (for example, the cost of materials and labour to build a bridge) and not the emissions produced.

However, with the growing awareness of climate change, some decision-makers are taking into account the "social cost of carbon"—an estimate of the economic damage of rising carbon-dioxide emissions. (**Appendix 8** provides a detailed discussion on considering the costs of carbon.)

Including social costing of carbon in project costs can increase the cost of projects that are expected to increase emissions (highway expansions, for example), but it can also decrease the cost of projects expected to reduce emissions (ethanol fuel programs, for example). Examples where the social cost of carbon has been applied to project evaluations include the following:

- The Ministry's Greener Diesel Regulation, intended to increase the use of biofuels in diesel, was evaluated to have a benefit of $31.56 per tonne to reflect the social cost of carbon. The Ministry derived this amount by averaging economic and environmental estimates of the average cost of a tonne of emissions.
- The Hurontario Light-Rail Transit Project, where Metrolinx considered estimates of resulting emissions in its business case by building into its decision-making model a cost of $40 per tonne of emissions, based on an average of social-costs analyses, including one by Environment Canada.

At the time of our audit, the Ministry had not developed any guidance on how ministries and agencies should consistently incorporate the concept of a social cost of carbon into their decision-making.

In 2007, the government recognized the need for an overriding authority to support its climate-change goals, given that ministries often do not consider the impact their projects or initiatives have on greenhouse-gas emissions.

The government established a Climate Change Secretariat that operated out of Cabinet Office from 2008 to 2011, when it was dismantled. The Secretariat was responsible for co-ordinating and reporting on the progress of climate-change initiatives, but it did not have the authority to require ministries to take specific actions to reduce emissions. Instead, it had the authority only to suggest possible actions, which ministries could either act upon or ignore.

We spoke with former members of the Secretariat, who indicated that initially their work had included regular meetings with the Premier to assess the progress of government climate-change initiatives and suggest actions that could be taken to reduce greenhouse gases—in effect, acting as an adviser to the Premier. However, the economic downturn caused a shift in priorities, and the Secretariat ceased to operate in this capacity and was eventually dismantled.

The former staff also indicated that in order to be effective, an independent climate-change entity would need to be established, and would need to have more cross-ministry influence, and this entity should report directly to Cabinet rather than just to the Minister. Such direct reporting was considered necessary to ensure climate-change goals were also given priority along with the goals of ministries.

Currently, the government has a Minister's Table on Climate Change intended to engage ministers on climate-change related issues. The Table consists of ministers from ten ministries: Environment and Climate Change, Transportation, Economic Development and Growth, Northern Development and Mines, Government and Consumer Services, Agriculture and Rural Affairs, Energy, Municipal Affairs, Treasury Board Secretariat, and Finance.

RECOMMENDATION 7

To help guide decisions of ministries and agencies on projects and initiatives, the Ministry of the Environment and Climate Change should develop guidance on the social cost of greenhouse-gas emissions that the ministries and agencies can consistently factor into their decision-making.

MINISTRY RESPONSE

The Ministry recognizes the importance of considering the social cost of carbon in government and agency decision-making. The social cost of carbon is used in a number of jurisdictions as an estimate of the value of avoided climate change

resulting from regulations and policies that reduce greenhouse-gas emissions. Both the Canadian and U.S. federal governments apply the social cost of carbon in their regulatory impact analyses. The Ministry is supportive of this recommendation and is working to encourage greater consideration of climate change impacts in the Government of Ontario's decision-making on a consistent basis.

The Ministry will consider the development of a guidance document on the social cost of carbon for ministries and agencies to use in their decision-making.

RECOMMENDATION 8

To support climate-change mitigation and adaptation efforts government-wide, the Ministry of the Environment and Climate Change should:

- evaluate whether the Minister's Table on Climate Change is sufficient to ensure climate-change mitigation and adaptation goals are also given priority in ministries' and agencies' projects and initiatives and take any necessary corrective action; and
- revise the guidance on how environmental assessments are conducted to ensure it includes a range of alternatives that have varying impacts on greenhouse-gas emissions.

MINISTRY RESPONSE

The Ministry appreciates the Auditor General's comments on how we can better support government-wide climate change efforts.

The Ministry has been charged with leading the fight against climate change on behalf of the Government of Ontario, and our Minister is chair of Cabinet's Minister's Table on Climate Change. We work with partner ministries, stakeholders, Indigenous partners and the public to oversee the implementation of the Climate Change Action Plan, to ensure reductions in greenhouse gas pollution and to support Ontario's transition to a low-carbon economy. In addition, the Ministry will evaluate whether the Minister's Table on Climate Change is sufficient to ensure climate-change goals are also given priority.

Action on climate change cuts across a number of ministries. Where other ministries have a role, they have been mandated to deliver results under the Action Plan.

To further broader adoption of climate-change-supportive actions in decision-making, the Ministry's draft guidance for considering climate change in Environmental Assessment was posted on the Environmental Registry on September 12, 2016. The draft guidance requests proponents review their project for the potential to reduce greenhouse-gas emissions (climate change mitigation) before reviewing the same project for its resilience (climate change adaptation). The Ministry expects to finalize this guidance document shortly.

4.6 Communication to Public about Cap and Trade Has Been Confusing

In an area as complex as cap and trade, there are inherent challenges in communicating clear and accurate messages to the public. These challenges grow even more complex when factoring in uncertainty about how initiatives impact greenhouse-gas emissions, and the social cost of carbon.

That said, we noted instances where ministries' messages about cap and trade may have been incomplete and confusing. **Figure 12** presents some of these public communications and additional facts.

Further, communications to natural gas ratepayers starting in 2017 will not be clear and transparent regarding the impact that cap and trade will have on natural gas bills.

Starting in 2017, such bills will increase by $60 a year. However, the Ontario Energy Board ruled, on July 28, 2016, that it would not require natural gas bills to explicitly state that this additional cost is attributable to cap and trade.

Figure 12: Confusing Messages about the Cap-and-Trade System

Source of data: Various

Cap-and-Trade System as Presented to the Public	Additional Facts
Under cap and trade, Ontario will achieve sufficient emission reductions to enable it to meet its 2020 target.	Most reductions will be achieved by buying allowances from California and Quebec. Actual projected emissions reductions achieved in Ontario will be only 3.80 Mt of the total 18.7 Mt needed. An analysis commissioned by the Ministry notes it is estimated that, in 2020, $268 million will be spent by Ontario companies purchasing allowances from California and Quebec. Preliminary estimates by the Ministry used to inform program design forecast this to rise to over $2.2 billion in 2030.
Price paid by emitters for an allowance will be determined by the market.	The market price of an allowance sold at auction cannot fall below the floor determined jointly by the three jurisdictions involved in the linked cap-and-trade system. The floor price is based on the previous year's floor price plus 5% and inflation.
Ontario emissions cannot go above the Province's emissions cap.	Ontario may exceed its cap because of free allowances provided for actions taken before the introduction of cap and trade. Also, linking with Quebec and California will mean Ontario's emissions can exceed Ontario's own cap as long as the total emissions in the linked system do not exceed the overall cap.
Industry funds the bulk of cap-and-trade costs and households benefit.	Households and small/medium businesses will initially pay the majority from charges embedded in fuel costs.
Cost of cap and trade to an average household is $13/month in 2017.	There will also be indirect costs. Preliminary estimates by the Ministry of Finance note that the direct costs to the average Ontario household will be $210 in 2019, with an additional $75 in indirect cost for goods and services. The Ministry has not determined the impact on more vulnerable northern and rural households.
The Climate Change Action Plan indicates cap-and-trade revenues spent on emissions reduction projects can achieve 9.8 Mt of greenhouse gas reductions by 2020.	Ministry's environmental consultant estimated cap and trade and spending of cap-and-trade revenues would result in reductions of 3.8 Mt.
The Climate Change Action Plan is a new initiative.	The Climate Change Action Plan has allocated $952 million to existing projects, such as the electrification of GO Transit in the 2014 Budget.

The Board said that it was not necessary to separately disclose the impact of cap and trade for regular household ratepayers because, in its view, the impact of one component of the bill is irrelevant. Instead, the Board said, total cost is the only factor that impacts the amount of natural gas used. However, the Board has decided to require natural gas utilities to disclose the added cost to large industrial users.

The Board obtained feedback from 80 stakeholder groups that included Vulnerable Energy Consumers Coalition, utilities such as Enbridge and Union Gas, and the Association of Power Producers of Ontario. Seventy-five of these stakeholder groups indicated that they supported separate disclosure on the natural gas bill. The Board did not seek comments from the general public. We contracted a national survey company to conduct a broad survey of Ontario natural gas ratepayers, and it found that 89% of respondents thought it important to disclose the impact of cap and trade on natural gas bills. Furthermore, in our view, disclosing this information on the natural gas bill could help educate ratepayers on the impact that using natural gas has on greenhouse gases, which could encourage them to switch to an energy source, such as electricity, that produces less greenhouse gas.

RECOMMENDATION 9

To ensure that Ontarians have a clear understanding of the impact on them of cap and trade, the Ministry of the Environment and Climate Change should:

- ensure that its communications to the public are open and transparent; and
- explain clearly how it plans to meet its targets for reducing greenhouse-gas emissions, including all costs to Ontarians associated with implementing the system.

MINISTRY RESPONSE

The Ministry recognizes the importance of Ontarians having a clear understanding of the impact of climate change and how cap and trade can drive emissions reductions by changing behaviour in how we use fossil fuels in our homes, transportation systems and businesses. The Ministry has undertaken many forms for communication with the public, and has endeavoured to be open and transparent in its communications.

In 2015, Ontario engaged Ontarians in a province-wide dialogue on climate change. We held dialogues in 15 communities across the province with over 1,200 individuals and nearly 300 businesses, had more than 31,000 responses through an online consultation tool, and received over 500 comments on a discussion paper. Those consultations helped shape our Climate Change Strategy and Climate Change Action Plan.

Since finalizing the rules for cap and trade in May 2016, we have continued to engage the public, stakeholders and industry on the development of this program. As suggested by the Auditor General, we will explore additional ways of clarifying our messaging to the public and clearly reporting on the costs to Ontarians of the cap-and-trade program.

RECOMMENDATION 10

In order to ensure transparency and inform natural gas ratepayers about the greenhouse-gas impacts of their energy choices, the government should ensure that natural gas bills disclose the portion of charges in the bill attributable to the cap-and-trade program.

ONTARIO ENERGY BOARD RESPONSE

The following is what the Ontario Energy Board plans to include in customer gas bills:

> [Your utility] is taking steps to address climate change. As part of Ontario's Cap and Trade program, there will be costs related to carbon emissions that your utility emits in order to deliver gas to you as well as the cost of carbon emissions resulting from the natural gas consumed by you. The charges to recover these costs are included in the delivery line. Further information on this may be found at (website).

The Ontario Energy Board will hold a hearing to review the natural gas distributors' cap-and-trade compliance plans for prudence and reasonableness of the costs consequences of these plans. As part of that adjudicative process, the Ontario Energy Board will issue a broad public notice of hearing, and the hearing will be held in an open and transparent manner. That notice will include an estimate of the monthly bill impact on customers of the cap-and-trade program. Interested parties can participate in the Board's hearing and information on the cost of the cap-and-trade program will be publicly available.

AUDITOR GENERAL'S RESPONSE

The Office of the Auditor General feels that more transparency is still required by disclosing the portion of charges in natural gas bills attributable to the cap-and-trade program and

informing natural gas ratepayers about the greenhouse-gas impacts of their energy choices.

Adaptation

The Ministry of the Environment and Climate Change (Ministry) does not have the authority to ensure the government implements the necessary measures to reduce the harm caused by climate change—that is, their adaptation activities. However, the Ministry is the lead in developing the government's Adaptation Plan. **Section 4.7** addresses provincial adaptation activities.

4.7 Many Actions Recommended by Expert Panel in 2009 Still Outstanding

In 2007, the Ministry assembled an Expert Panel on Climate Change Adaptation (Expert Panel) to consider the potential risks posed by climate change to Ontario's infrastructure, water, agriculture, forests and ecosystems, and to Ontarians' quality of life in general.

The Expert Panel issued a final report in 2009 to "help the Ontario government, municipalities and Ontarians prepare and plan for the impact of climate change in areas such as public health, environment, infrastructure and the economy."

The report was used to develop Climate Ready, the Ministry's Climate Change Adaptation Strategy and Action Plan (Adaptation Plan), which included 37 actions to be completed across the government between 2011 and 2014. However, many of the action items were not completed as of August 2016. (**Figure 8** provides the current status of each action item.)

The Adaptation Plan set out most of the Expert Panel's recommended initiatives to address the more significant risks of climate change. The Ministry listed actions to be undertaken by other ministries. However, the Ministry does not have the authority to require other ministries to complete the actions or to report back.

As detailed in the following sections, our discussions with these ministries indicated that little or no progress had been made.

4.7.1 Northern Ontario More Vulnerable but Adaptation Actions Not Implemented

The Ministry and the Expert Panel forecast that Northern Ontario will be most affected by climate change due to a higher degree of warming, and compounded by the fact that the North's infrastructure and economy depend on colder weather. The Ministry of Northern Development and Mines was accordingly assigned the following action items:

- **Northern Community Winter Roads:** Under the Adaptation Plan, the Ministry of Northern Development and Mines was tasked with strengthening the winter ice-road network for rural northern communities. Winter ice roads are important to sustain the economies and health of remote communities by ensuring reliable supplies of food and other essential goods. However, the Ministry of Northern Development and Mines has not determined what parts of the winter ice road network are most likely to be vulnerable to warming. The Ministry also does not track the frequency of air transport of supplies and food to Northern Ontario and so could not estimate the extent to which the deterioration of ice roads might have affected the availability of supplies to northern communities. However, it reported that winter roads were available one or two months less than usual in the winter of 2015/16, resulting in delayed shipments of food, fuel and other supplies.
- **Northern Community Decision-Making and Monitoring:** In 2011, the Ministry of Northern Development and Mines initiated a Growth Plan for Northern Ontario to be fully implemented within 25 years. Among other things, the plan was to:
  - incorporate considerations of climate-change adaptation into its planning and

decision-making, including monitoring the impact of climate change on Northern Ontario; and
- implement measures to protect and preserve air quality from possible forest fires, water quality and quantity from reduced water levels, and natural heritage from the destructive storms anticipated due to climate change.

The Plan does not provide timelines to measures progress towards planned actions, such as those related to climate-change adaptation.

4.7.2 Adaptation Also Required in Southern Ontario

Although Northern Ontario is expected to experience the most significant effects of climate change, southern Ontario will also likely experience more severe weather.

The impact will also be magnified by the larger population in the south, leading to the potential for more overall property damage and widespread impact on quality of life. Threats identified in the Adaptation Plan, but not adequately addressed include:

- **Building Codes:** The Ministry of Municipal Affairs and Housing was tasked with developing changes to the provincial Building Code that would make buildings more resilient to the effects of climate change, but it has no data on the extent to which the current Building Code (applicable as of 2014) has incorporated considerations related to climate change.
- **Tourism:** The Ministry of Tourism, Culture and Sport was to run pilot programs on adaptation strategies for Ontario's tourism industry by 2014 in an effort to gradually shift tourism from winter-weather outdoor activities to more warm-weather ones, but none were ever run.

4.7.3 Preserving Biodiversity and Supporting Ecosystems in a Changing Climate

Climate change is expected to have a significant impact on the biodiversity of the various ecosystems in Ontario. The Ontario Biodiversity Council notes that biodiversity is important because the survival of all species is interconnected.

Under the Adaptation Plan, the Ministry of Natural Resources and Forestry (MNR) was tasked with preserving biodiversity and improving the resiliency of ecosystems to climate change. In response, the MNR in 2011 developed Ontario's Biodiversity Strategy, which committed it to complete many of the required actions by 2015, and the rest by 2020.

However, the Ontario Biodiversity Council reported in 2015 that little progress had been made on most of the actions to improve ecosystems' resilience to climate change.

4.7.4 Inadequate Assessment of Impact on Public Buildings and Energy Infrastructure

Buildings

The Province directly owns or controls almost 5,000 buildings and related facilities, such as courthouses, detention centres, Ontario Provincial Police facilities, data centres and government offices. In addition, the Province is also responsible for hospitals, schools and college campuses. In total, these assets are collectively worth more than $50 billion. Given the value and importance of these assets, it would be wise for the government to identify and plan for risks arising from climate change.

The Ministry's 2011 Adaptation Plan committed to conduct reviews of all types of government buildings throughout the province. In order to perform this kind of assessment, the Ministry would have needed to obtain profiles of different building types, and the number of buildings of each type in different parts of the province. However, the Ministry did not obtain this information.

Instead, in 2012, the Ministry conducted a climate-change vulnerability assessment of only three buildings. While each of the assessments reviewed a different type of building (specifically, a courthouse, police detachment and administrative building), all were located in southern Ontario. The Ministry does not have any plans to conduct further vulnerability assessments.

Energy Infrastructure

The Adaptation Plan has not assigned specific actions to address the effects of climate change on the province's energy infrastructure. The Ontario Energy Board (OEB) relies on each local distributor of electricity and natural gas to identify infrastructure upgrades needed to guard against future climate-change risks, such as extreme storms. However, neither the OEB nor the Ministry of Energy have any information on whether appropriate actions are being taken to ensure distributors can withstand the effects of climate change.

RECOMMENDATION 11

To better prepare Ontario for the effects of climate change, the Ministry of the Environment and Climate Change (Ministry) should:

- review its Climate Change Adaptation Strategy and Action Plan to determine whether it should be revised, and revise it as required;
- ensure all Climate Change Adaptation Strategy and Action Plan actions have completion timelines; and
- ensure it completes the action items for which it is directly responsible.

MINISTRY RESPONSE

As part of its mandate letter commitments (September 2016) and the commitments in the Climate Change Action Plan, the Ministry has been directed to "work with partner ministers, stakeholders and Indigenous partners, and develop a (new) Climate Change Adaptation Plan for Ontario that sets out priorities and actions Ontario will take to adapt to the effects of Climate Change". This builds on the efforts made on some of the recommendations in Ontario's first adaptation plan announced in 2011.

To support the development of the new Climate Change Adaptation Plan, since spring 2016, the Ministry has been engaging with partner ministries and key stakeholders to:

- discuss successes of Climate Ready, including an assessment of progress on actions, and identification of areas that can be further strengthened;
- build on previous commitments and identify new actions for the new Plan with a focus on current priorities (i.e., infrastructure, food security, remote communities); and
- ensure actions in the new Plan are supported by specific implementation and reporting timelines.

In addition, the Ministry is also exploring options to enhance governance and accountability mechanisms to co-ordinate adaptation action across government.

RECOMMENDATION 12

The Secretary of Cabinet, in conjunction with relevant ministries through the Ontario Deputy Ministers' Council, should help to ensure that actions in the Climate Change Adaptation Strategy and Action Plan that are not the direct responsibility of the Ministry of the Environment and Climate Change are completed on time by their respective ministries.

MINISTRY RESPONSE

The Secretary of Cabinet agrees with this recommendation and will work with relevant ministries to help ensure climate-change adaptation-plan actions are completed.

4.7.5 Ministry Has Not Developed Useful Information on Future Climate Events

Governments, businesses, and individuals require information on weather events arising from climate change to make informed decisions on matters ranging from the design of buildings to planning for crops.

The required information includes precipitation amounts, timing and frequency of freeze-and-thaw cycles, forecast temperatures, and storm intensities. Because of the complexity and range of assumptions that go into forecasts of weather patterns, it is important to generate multiple forecasts, or "models," to cover different scenarios.

The Expert Panel on Climate Change Adaptation noted that accurate weather forecasts are difficult to develop, and that any one forecast will not be sufficient to support proper planning. It indicated that the best approach is to use multiple forecasts—for example, forecasting the intensity of storms if global temperatures rise by 1.5°C, and by 2°C.

Consequently, the Expert Panel report presented a combined forecast using 24 different scenarios for weather, precipitation and temperature across Ontario. It showed, for example, the effect on annual average precipitation in 2050 if greenhouse-gas emissions are lowered, and if emissions are higher.

The Panel recommended the Ministry acquire, analyze and share climate-trend data and scenarios for extreme weather to help communities throughout Ontario take informed adaptation actions.

While the Ministry has developed some future weather information using various weather models, it has not created the type of combined forecast suggested by the Expert Panel. A combined weather model allows organizations such as municipalities and other non-expert users to appropriately plan for changes to precipitation, temperature ranges and duration of intense heat.

Use of Modelling to Evaluate Impact of Climate Change on Province's Highways

The Ministry of Transportation used one of the Ministry of the Environment and Climate Change's weather models to assess the impact of projected precipitation on highways and bridges, and concluded they are resilient to the anticipated precipitation.

However, the Ministry of Transportation also noted that this one model was not sufficient to support its planning activities, and it funded a University of Toronto study to research and update its existing method for estimating flood frequency and peak flow using historical data, in order to assess the suitability of bridges and culverts.

The study reported that the method used did not incorporate any consideration of future climate change because the possible impacts were too uncertain, and that further study was necessary to properly incorporate the effects of climate change.

4.7.6 Municipalities Need More Support to Adapt to Climate Change

The more than 400 municipalities in Ontario have varying degrees of expertise on assessing weather patterns caused by climate change, and on formulating appropriate actions. The Ministry has not provided sufficient tools such as weather modelling, or adequate guidance, to help municipalities address their respective risks.

The Association of Municipalities of Ontario said in 2011 that developing effective climate-change initiatives requires a high degree of technical expertise and significant staff resources to translate climate data into usable information for municipal decision-making, such as official land-use planning, capital asset management and transportation planning. The Association told us in 2016 that it remains concerned that municipalities lack sufficient expertise and resources but that certain commitments in the Climate Change Action Plan may help to address municipal needs.

In recognition of the need for municipalities to understand and respond to risks posed by climate change, the Insurance Board of Canada started a pilot program in 2009 in three Canadian municipalities for a municipal risk-assessment tool that would be usable by all Ontario municipalities to identify key areas for adaptation efforts related to storm-water flooding. However, Ontario municipalities continue to lack user-friendly forecasting tools for most other weather-related events, including overland flooding, freeze-and-thaw cycles, and extreme heat.

RECOMMENDATION 13

As recommended by the Expert Panel on Climate Change Adaptation, the Ministry of the Environment and Climate Change should:

- obtain information on multiple weather forecasting scenarios using different weather, precipitation and temperature assumptions across Ontario; and
- share this information with all relevant stakeholders for planning adaptation preparations.

MINISTRY RESPONSE

The Ministry agrees with the Auditor General's recommendation. As committed to in the Climate Change Action Plan, the new Climate Change Adaptation Plan for Ontario will provide details of a new Climate Modelling Collaborative (a modelling group that involves other ministries and stakeholders). This Modelling Collaborative will help decision-makers understand potential climate impacts so they can make effective, climate-resilient decisions.

The Climate Modelling Collaborative will build on the province's previous investments in climate modelling information, which has included:

- refining/developing more robust Ontario-specific high resolution regional ensemble climate projections based on multiple climate models and scenarios, with an aim to develop a consolidated set of projections for Ontario;
- sharing Ontario-specific regional climate projections via a climate data portal with user-friendly access and visualization to the public and municipalities, free of charge; and,
- holding additional training sessions to improve practitioners' understanding and use of this climate information to support the development of climate adaptation strategies across the province.

4.7.7 Ministry Not Tracking Effects of Climate Change

One of the key goals of the Adaptation Plan was to "achieve a better understanding of future climate change impacts across the province." The Adaptation Plan required the Ministry to conduct a Climate Impact Indicators Study (Study) to track and assess the success of government policy and programs in the Adaptation Plan, for example, on the following areas:

- *Broad environmental*—water quality and quantity, fish and wildlife populations, and forest health.
- *Economic-specific sectors*—golf course open/closing days, yields on agricultural products, ski lift-pass sales, etc.
- *Social and health*—heat alert days, reported respiratory distress (which can be brought on by extreme heat), and municipal water-use restrictions.

The Adaptation Plan indicated the Study was to be used in conjunction with ongoing climate-monitoring data such as precipitation, wind speeds, and humidity, to analyze trends and assess government policy and programs. At the time of our audit, the Ministry had not conducted this Study.

RECOMMENDATION 14

In accordance with its Climate Change Adaptation Plan, the Ministry of the Environment and Climate Change should:

- conduct a Climate Impact Indicators Study to track and assess the success of government policy and programs in the Adaptation Plan; and
- share the results of the study with other appropriate ministries and municipalities to support decisions made or determine what further actions need to be taken.

MINISTRY RESPONSE

The Ministry agrees with the Auditor General's recommendation. As part of the development of the new Climate Change Adaptation Plan for the province, the Ministry will assess the success of government policy and programs in the Adaptation Plan, including consideration for:

- monitoring programs underway across government to increase our understanding of the impacts of climate change;
- initiatives across government that support understanding of the results of such monitoring programs and the status and trends over time on both the natural and built environment; and
- reporting publicly on the progress of the Adaptation Plan.

4.7.8 More Public Information Needed on Climate-Change Impact and Adaptation Plan

The Ministry has not taken any significant measures to educate the public on specific risks associated with climate change, and what Ontarians need to do to adapt to those risks. Such information could prompt Ontarians to assess their own vulnerabilities and take action by, for example, installing backwater valves to protect against flooding, or new cooling systems to deal with increasingly severe heat.

The Expert Panel recommended that the Ministry take the lead in developing a readily available and understandable projection on the future weather-related changes that Ontarians can expect. The Ministry has modelled climate data but has not interpreted it to make it available in an understandable form.

Also, since introducing its Adaptation Plan in 2011, the Ministry has publicly reported on the status of the plan only once, in 2012. As indicated earlier, many of the actions in the Adaptation Plan remain outstanding. Following the completion of our audit field work, the Ministry indicated that it planned to have a new plan by the end of 2017.

RECOMMENDATION 15

To help Ontarians assess their own vulnerabilities to climate change, and to take action to address them, the Ministry of the Environment and Climate Change should provide the public with regular information on specific risks of and possible responses to the effects of climate change in Ontario.

MINISTRY RESPONSE

The Ministry agrees with the Auditor General's recommendation. As part of the establishment of the Climate Modelling Collaborative, the Ministry has committed to provide:

- a one-window repository for information about current impacts and projections for the future that the public can use to assess their own vulnerabilities; and
- access to expertise to understand how climate change may affect different activities or lines of business, and help plan for and manage risks in areas such as farming, infrastructure and public health.

RECOMMENDATION 16

To promote transparency and accountability, the Ministry of the Environment and Climate Change should revise as needed and regularly report publicly on the implementation status of its Climate Change Adaptation Strategy and Action Plan.

MINISTRY RESPONSE

The Ministry recognizes the importance of promoting transparency and accountability in the implementation status of the Climate Change Adaptation Plan. The Ministry will endeavour to publicly report on a regular basis and revise the plan as directed by Cabinet.

Appendix 1: Climate Change and Greenhouse Gas Overview

The Intergovernmental Panel on Climate Change (Panel) is an international body established in 1988, sponsored by the United Nations Environment Program and the World Meteorological Organization. The Panel's purpose is to provide the world with regular assessments of scientific knowledge on climate change, including its causes, potential impacts and future risks.

According to the Panel's 2014 Fifth Assessment Report, the average global temperature increased by approximately 0.85°C between 1880 and 2012. Observed impacts of this warming include rising atmospheric temperatures, shrinking glaciers, decreased ice and snow levels, and rising sea levels. This warming has also resulted in changing weather patterns around the world and more frequent extreme weather events (such as extended heat waves, flooding, longer wildfire seasons and extended droughts). The Panel has stated that increased concentrations of greenhouse gases in the atmosphere will lead to increased global warming, with an increased risk of irreversible impacts on people and the environment.

The Panel's Report stated that a 1°C–2°C increase in the average global temperatures from pre-industrial levels (that is, from the temperatures occurring around 1880) is expected to:

- increase the risk of extreme weather events;
- decrease crop yields and water availability in some regions of the world; and
- possibly put certain ecosystems, such as coral reefs, at risk of abrupt and irreversible change.

The Panel's Report further stated that an average global temperature increase of 4°C or more is expected to result in substantial species extinction, global and regional food insecurity, severe constraints on common human activities, and limited room for humans to find ways to adapt to the change in climate. (For more information on climate change adaptation, refer to **Appendix 2**.)

While some greenhouse gases are produced naturally, such as from forest fires and volcanoes, the Panel has concluded that current global warming can largely be attributed to human activities. Specifically, the burning of fossil fuels is a primary contributor to the increase in greenhouse gas emissions over the last 135 years or so (that is, since the pre-industrial era). The Report details that this increase has been spurred by economic and population growth, and has resulted in greenhouse gas concentrations that are higher than anything experienced in the last 800,000 years.

Common sources of human-made greenhouse gases include electricity generation, industrial activities, buildings being heated and transportation. These are known as "combustion" emissions. Other emissions, known as "process" emissions, are created as a by-product of industrial processes. For example, carbon dioxide (a greenhouse gas) is produced when limestone is converted to a lime compound in the process to make cement. Greenhouse gases are also produced from the decomposition of organic waste in landfills and from agricultural activities, such as fertilizing soil using artificial fertilizers.

Greenhouse gases include carbon dioxide, methane, nitrous oxide, ozone, hydrofluorocarbons, perfluorocarbons and sulphur hexafluoride. To measure and study greenhouse gases, scientists usually convert the other gases to their "carbon dioxide equivalent"—that is, the amount of carbon dioxide that would create the same amount of warming. Greenhouse gases are generally measured in tonnes (t) and megatonnes (Mt).

Global warming results from the total accumulation of greenhouse gases in the atmosphere; emissions made decades ago still contribute to climate change today and will continue to do so into the future. According to the Panel's Report, even if new greenhouse gas emissions stopped today, many aspects of climate change and their related impacts would continue for decades.

Under international guidelines provided by the United Nations Framework Convention on Climate Change, national governments that are Annex 1 parties to the Convention, such as Canada and the United States, are required to report their greenhouse-gas emissions on an annual basis following specific science-based methodologies.

Using complex mathematical models, Environment and Climate Change Canada, a department of the federal government, annually estimates the greenhouse gas emissions of each province, including Ontario, and the country as a whole. These estimates are included in Environment and Climate Change Canada's National Inventory Report. This Report does not include certain emissions that are more difficult to measure (such as emissions from land use and forestry) or allocate to a jurisdiction (such as emissions from international air travel).

Appendix 2: Mitigation and Adaptation Efforts

Climate Change Mitigation

Typically, climate change mitigation focuses on:

- limiting or reducing the amount of greenhouse gas emissions caused by the burning of fossil fuels (for example, by conserving energy or using renewable fuels); and
- capturing carbon (for example, by preserving or creating "carbon sinks," which are natural environments such as forests or bogs that can absorb more carbon than they release).

Some governments use carbon pricing, such as a carbon tax, and regulatory requirements to reduce emissions. Governments may also use voluntary programs, such as providing cash rebates for the purchase of electric cars to encourage emissions reductions (see **Figure 3** for more information on these methods).

The goal of international agreements on climate change has been to limit the increase in average global temperatures to less than 2°C higher than pre-industrial levels (that is, the global temperatures of around 1880). In December 2015, 195 countries, Canada included, negotiated the Paris Agreement, with the aim of "holding the increase in the global average temperature to well below 2°C above pre-industrial levels and to pursue efforts to limit the temperature increase to 1.5°C above pre-industrial levels."

Prior to the Conference at which the Agreement was negotiated, 146 countries, representing almost 87% of global greenhouse gas emissions, submitted their intended national climate action plans to the United Nations. The United Nations Environment Programme calculated that even if all 146 countries met their current targets, global warming would still be expected to increase by 3°C–4°C.

Climate Change Adaptation

The impacts of global warming can vary in different regions around the world. For example, regions further from the Equator are expected to experience a much faster increase in average temperatures than regions closer to the Equator. Consequently, climate change adaptation efforts generally vary from region to region.

Adaptation actions include such efforts as upgrading infrastructure to withstand increases in precipitation, for example, by installing valves in homes to prevent storm water from flooding basements, adjusting urban planning to prohibit building on flood plains and strengthening culverts under highways. Other adaptation measures include monitoring for new harmful or invasive species, such as ticks, brought about by climate change; and assisting businesses like ski resorts to adjust to changes in seasonal temperatures.

Appendix 3: The Western Climate Initiative and the Western Climate Initiative, Inc.

The Western Climate Initiative

The Western Climate Initiative (WCI) was launched in February 2007 by five American States (California, Washington, Oregon, Arizona, New Mexico and California). Its purpose was to develop ways to reduce greenhouse gas emissions in their respective states. The members committed to setting a regional greenhouse gas target and implementing a market mechanism, such as cap and trade, to achieve it. WCI is a "non-binding, voluntary coalition," meaning that the commitments the members make are not enforceable, and there are no sanctions if members do not comply.

In 2007 and 2008, two more states (Montana and Utah) and four provinces (British Columbia, Manitoba, Ontario and Quebec) joined WCI.

In 2008, WCI released the "Design Recommendations" for the WCI Regional Cap and Trade Program. In 2010, WCI released the "Design for the WCI Regional Program." These two documents show what a regional cap-and-trade program looks like and are the basis for Quebec and California's linked cap-and-trade program.

By 2011, six of the seven U.S. member states had left WCI because they were no longer planning to implement cap and trade. This left California, British Columbia, Manitoba, Ontario and Quebec as the remaining members. Of them, only Quebec and California have implemented a cap-and-trade system to date, with Ontario planning implementation in 2017.

The Western Climate Initiative, Inc.

In November 2011, California, Quebec, Ontario and British Columbia created the Western Climate Initiative, Inc. (WCI, Inc.). WCI, Inc. is a non-profit corporation dedicated to provide administrative and technical services in support of greenhouse gas reductions.

WCI, Inc. is governed by a board of directors made up of two members from each participating jurisdiction. The board receives direction from the participating jurisdictions and is responsible for overseeing the corporation.

WCI, Inc. has been administering California and Quebec's systems since 2013, and will administer Ontario's cap-and-trade program. Ontario's Ministry of the Environment and Climate Change plans to pay WCI, Inc. almost $9.9 million for its services between the 2016/17 and 2020/21 fiscal years. According to the Ministry's 2016 agreement with WCI, Inc., these services will include:

- developing and administering a system for monitoring allowances and emissions, to which the Ministry will have access;
- monitoring allowance auctions, and allowance and offset trading;
- supporting WCI, Inc. board activities;
- developing and administering an auction platform;
- co-ordinating financial administration services for auctions; and
- providing customer services and support.

Appendix 4: Chronology of Ontario's Climate Change Activities

Date	Event
May 2007	Ontario's Premier signs the "Memorandum of Understanding between the Province of Ontario and the State of California for collaboration on climate change and energy efficiency." The Memorandum states the parties will "explore the potential for linkages between market-based mechanisms" to reduce greenhouse gas emissions, such as working with the Western Climate Initiative (a voluntary coalition of U.S. states and Canadian provinces working on a linked cap-and-trade system for its members).
August 2007	Ministry of the Environment (Ministry) introduces "Go Green: Ontario's Action Plan," and sets greenhouse gas reduction targets for 2014, 2020 and 2050.
December 2007	Ministry forms an Expert Panel on Climate Change Adaptation to consider the potential risks climate change poses to Ontario's infrastructure, water, agriculture, forests, ecosystems and the quality of life for Ontarians.
May 2008	Ontario establishes the Climate Change Secretariat, based out of Cabinet Office and reporting directly to the Premier.
June 2008	Ontario and Quebec sign a Memorandum of Understanding to develop a linked cap-and-trade system to be implemented as early as 2010.
July 2008	Ontario joins the Western Climate Initiative.
Fall 2008	The Ontario economy begins experiencing the impact of a global economic downturn.
November 2008	The Climate Change Secretariat's reporting structure changes: it now reports directly to the Minister of the Environment rather than the Premier.
December 2008	Ontario releases its first discussion paper on cap and trade, "A Greenhouse Gas Cap-and-Trade System for Ontario." The paper states Ontario "is pursuing through partnerships such as the Western Climate Initiative the integration into a broad North American Cap-and-Trade system for greenhouse gases—one that will guarantee reductions in greenhouse gas emissions" from electricity generators and industrial sectors.
May 2009	As part of the *Green Energy and Green Economy Act, 2009*, Ontario amends the *Environmental Bill of Rights, 1993* to require the Environmental Commissioner to monitor and report on the government's progress in reducing greenhouse gases.
June 2009	Ontario releases its second cap-and-trade discussion paper, "Moving Forward: A Greenhouse Gas Cap-and-Trade System for Ontario." The purpose of the paper was "advancing work on the design of a greenhouse gas emissions trading system for Ontario to help meet the province's climate change reduction goals."
November 2009	Ontario's Expert Panel on Climate Change Adaptation issues a report "to help the Ontario government, municipalities and Ontarians prepare and plan for the impact of climate change in areas such as public health, environment, infrastructure and the economy."
December 2009	Ontario passes the *Environmental Protection Amendment Act (Greenhouse Gas Emissions Trading)*. This enables the creation of an Ontario cap-and-trade system and the linking of Ontario's system with other systems in North America.
April 2011	Ministry releases Climate Ready, the Ministry's Climate Change Adaptation Plan. The Plan includes 37 actions to be completed between 2011 and 2014.
May 2011	The Climate Change Secretariat is wound down.
October 2011	Ontario establishes the non-profit organization Western Climate Initiative, Inc. (WCI, Inc.) with Quebec, California and British Columbia. According to its website, WCI, Inc. was "formed to provide administrative and technical services to support the implementation of state and provincial greenhouse gas emissions trading programs."
January 2013	Ontario releases its third discussion paper on cap and trade, "Greenhouse Gas Emissions Reductions in Ontario." The paper's purpose is to continue the discussion on "what could be the key elements of a greenhouse gas emissions reduction program that achieves reductions while supporting the province's economic goals."
January 2013	Quebec's and California's individual, unlinked cap-and-trade systems begin operations.

Date	Event
January 2014	Quebec's and California's cap-and-trade systems link up.
February 2015	Ontario releases "Ontario's Climate Change Discussion Paper 2015." The paper requests public feedback on different types of carbon pricing (i.e., on cap and trade versus carbon tax). It asks public opinion on what type of carbon pricing will meet Ontario's goals of ensuring emissions reductions, encouraging innovation, improving productivity and supporting the transition to a low-carbon economy.
April 2015	Ontario announces that it will implement a cap-and-trade system in 2017.
August 2015	Ontario appoints board members to WCI, Inc.
September 2015	Ontario and Quebec sign a second Memorandum of Understanding to link their carbon markets (see June 2008 for the first Memorandum of Understanding).
November 2015	The Ministry releases the Climate Change Strategy. The Strategy notes that meeting Ontario's future emissions reduction goals "requires a fresh approach to climate change—one that accounts for the shifting global context, recognizes the opportunities in a low-carbon, high-productivity economy, and enlists the support of all Ontarians to find new solutions." The Strategy does not make it clear that Ontario intends to use California's and Quebec's emissions reductions to meet its targets.
February 2016	The Ontario Government introduces its proposed *Climate Change Mitigation and Low-carbon Economy Act* in the Legislature.
May 2016	The Ministry receives its consultant's study comparing its chosen linked cap-and-trade program to two other carbon-pricing models (carbon tax and unlinked cap and trade).
May 2016	The *Climate Change Mitigation and Low-carbon Economy Act* becomes law.
June 2016	The Ministry releases the Climate Change Action Plan.

Appendix 5: The Mechanics of Ontario's Cap-and-Trade System

Participants

Under the rules of cap and trade, the required participants in Ontario's cap-and-trade system are:

1. industry and institutions that produce over 25,000 tonnes of greenhouse gases per year;
2. fuel suppliers that sell more than 200 litres of fossil fuels (for example, gasoline or diesel) per year; and
3. electricity suppliers importing electricity from outside of Ontario that produces greenhouse gases.

These required participants are expected to cover about 80% of the province's annual greenhouse-gas emissions in the "covered" sectors of transportation, industry, real estate and electricity.

In addition, facilities emitting between 10,000 tonnes and 25,000 tonnes of greenhouse gases per year may choose to opt in.

All cap-and-trade participants (required and those opting in voluntarily) must report their emissions every year and buy allowances equal to their total emissions.

It is assumed that fuel suppliers and electricity importers (the required participants of categories 2 and 3) will pass on 100% of their costs of having to buy allowances to households and businesses in the form of higher prices for gasoline and electricity. These are referred to as the direct costs of cap and trade. The indirect costs of cap and trade are the increased cost of goods and services that result from increased fuel and electricity costs.

Smaller businesses and Ontario households will not participate directly in cap and trade (that is, they will not purchase or sell allowances). However, they will still be affected by cap and trade through its direct and indirect costs. The government of Ontario has estimated that the direct costs to the average Ontario household will be $156 in 2017. Preliminary estimates by the Ministry of Finance have estimated the direct costs to the average Ontario household in 2019 will be $210, plus an additional $75 in indirect costs (i.e., costs other than fuel).

Allowances

An allowance is a permit to emit one tonne of greenhouse gas. There are four types of allowances under cap and trade, detailed in the following subsections.

1. Allowances Created by Ontario

Each year, the government of Ontario will create allowances equal to its cap (see the next section, titled **Ontario's Domestic Cap**). The government will set aside 5% of allowances each year as a strategic reserve (see the section **Carbon Price** for more information on strategic reserves). The government will decide how to divide up the other 95% of allowances: each will either be sold at auction or be given to emitters for free.

As shown in **Figure 5** of the report, larger industrial emitters (category 1 required participants) will receive free allowances for all of their emissions in 2017. The number of free allowances will gradually be reduced over the next three years (to 2020). This is intended to encourage these emitters to reduce their emissions. Otherwise, these emitters would have to purchase allowances.

Fuel distributors and electricity importers (required participants in categories 2 and 3) will not receive any free allowances. This will force them to purchase allowances equalling their emissions, with the cost passed down to consumers.

2. Early Reduction Allowances (Credits)

Ontario has announced that the Ministry of the Environment and Climate Change (Ministry) will issue up to an additional 2 million free "early

reduction" allowances (permitting 2 megatonnes (Mt) of emissions). These allowances will be issued to companies that reduced their emissions in the four years before cap and trade is implemented in January 2017. These allowances are over and above the province's cap. Businesses receiving these free allowances will be able to use them whenever they wish.

3. Offset Allowances (Credits)

A large emitter in a covered sector (that is, transportation, industry, real estate or electricity) can get credit if it undertakes a project that reduces greenhouse gases in a non-covered sector (that is, agriculture or waste) such as planting trees or capturing landfill gases. The credit is in the form of "offset allowances" for the amount of the reduction in greenhouse gases it achieved. The emitter can apply these allowances to offset up to 8% of its emissions in a covered sector.

At the time of our audit, the Ministry was developing offset protocols, or rules outlining how to measure and approve the reductions in the non-covered sectors. None had been finalized when we completed our audit.

4. Allowances Created by Quebec or California

Because Ontario's cap-and-trade system plans to link with the systems of Quebec and California, in 2018, Ontario's required participants will be able to buy and sell allowances from Quebec and California.

Ontario's Domestic Cap

Ontario's domestic cap refers to the total number of allowances that the Ministry will make available for auction each year. A regulation of the *Climate Change Mitigation and Low-Carbon Economy Act, 2016* specifies Ontario's caps for the years 2017–20.

In the first year (2017), Ontario will make available as many allowances as the Ministry forecasts the emitters in the covered sectors will need for all of their emissions. The forecasted emissions from the non-covered sectors of agriculture and waste (including landfills) are not included in the cap calculation. Also not included are greenhouse gas emissions that are difficult to measure (such as from domestic flights and gas leaks).

The Ministry will reduce the allowances (or lower the cap) such that the number of allowances available in 2020 (the cap) allows Ontario to just meet its 2020 target.

Linking with Quebec and California, and the Overall Cap

Under a linked cap-and-trade system, each linked jurisdiction is responsible for setting its domestic cap, issuing allowances, approving offset protocols, and developing other cap-and-trade–related policies for its jurisdiction. However, for cap-and-trade systems to be linked, jurisdictions must agree to recognize the transfer of allowances and offsets between participants and allow for joint auctions.

Because Ontario is planning to link its cap-and-trade system with the systems of Quebec and California, all three jurisdictions' individual caps will be combined to create a single *overall* cap.

Figure 6 in the report shows what this larger cap is expected to be. Under a linked system, a jurisdiction can exceed its domestic cap in allowances and emissions as long as the total allowances and emissions in the linked system do not exceed the overall cap. For example, Ontario's 2018 domestic cap is 136 Mt of emissions; Ontario's emissions can exceed that cap above that as long as Ontario's emitters purchase allowances from Quebec or California to cover the excess emissions.

The Carbon Market

Auctions (Primary Market)

Auctions will occur quarterly and will be facilitated by the Western Climate Initiative, Inc. (WCI, Inc.) (the non-profit organization Ontario established jointly with Quebec, California and British Columbia to support cap-and-trade programs).

Ontario has announced it will hold its own auctions in 2017. After linking with Quebec and California in 2018, the three jurisdictions will hold joint auctions. To take part in an auction, participants must be registered through WCI, Inc.'s compliance tracking system (for more on compliance tracking, see the section **Market Oversight**). Allowances will usually be sold in "lots" of 1,000. At the auctions, the final selling price is to be determined by the lowest bid for the last available lot.

WCI, Inc. has contracted with Deutsche Bank to provide financial services in support of the auction (such as confirming the bidder's financial eligibility, administering the bidder's financial guarantees and making payments after the auction).

Regulation requires that the Minister of the Environment and Climate Change release a summary of the auction results to the public within 45 days of the auction.

The Ontario government's revenue from cap and trade will come primarily from the auctioning off of Ontario allowances. The Ministry has estimated this will total about $8 billion in the first four years (2017–20), with most of it coming from fuel distributors (which have to buy allowances since they do not get any free ones). This estimated $8 billion in revenue assumes that all of Ontario's allowances will be bought.

The Ministry estimates that Ontario participants will buy 25.8 million allowances from California and Quebec in the first four years (2017–20). This will allow them to emit 25.8 Mt of greenhouse gases, for which it will pay California and Quebec a total of $466 million.

Trading (Secondary Market)

Beyond buying allowances at auctions, Ontario participants can also buy allowances from California and Quebec (the linked jurisdictions). This activity is referred to as the secondary market. The sellers will be California and Quebec emitters that got allowances for free, and California and Quebec emitters with allowances they do not need because they achieved actual emission reductions.

Price of Allowances

Theoretically, the price of allowances in a linked system with auctions and trading is set by the market. That is, supply (the total number of allowances released by Ontario, Quebec and California) and demand (the caps indicating how many allowances are needed) should determine the price.

However, the three jurisdictions decided to override market forces when it comes to the minimum price of an allowance to be sold at auction. In 2016, they set that minimum price at close to $17. This prescribed minimum price is scheduled to increase by 5%, plus inflation, each year until 2020.

This prescribed minimum price applies only to allowances sold at auction. The price of an allowance can drop below the auction minimum in trading directly between emitters.

California economists have forecast the market-driven allowance prices for just the linked California–Quebec cap-and-trade program as follows (prices have been adjusted to nominal $CAD, assuming annual inflation of around 2%):

- 2017: $18;
- 2018: $19; and
- 2020: $20.

Ontario used these prices to forecast both its revenue and greenhouse-gas reductions. That is, it did not do any projecting or modelling to see whether and how much its joining California and Quebec's linked system would affect allowance prices.

Each of the three jurisdictions has also set aside 5% of their cap as "strategic reserve" allowances.

These strategic reserve allowances can be released into the market if the allowance price gets too high.

Market Oversight

Each jurisdiction requires emitters of over 10,000 tonnes of carbon dioxide (or its equivalent) to:

- annually report their greenhouse gas emissions to their respective governments; and
- have a third party verify the emissions reported.

In 2020, after a four-year compliance period, all participants are required to ensure their total emissions equal their total allowances purchased. As mentioned in the **Allowances** section, up to 8% of an emitter's allowances can be offset credits.

All allowances and emissions reporting will be tracked by WCI, Inc. This includes reviewing all allowances, from when they were issued by a government, to being transferred to participants, and finally to being claimed for the year and surrendered back to the issuing government. As per the agreement, the Ministry has the right to audit WCI, Inc.

At the time of our audit, penalties for having fewer allowances than emissions had not yet been finalized.

Appendix 6: Environmental Assessments and Approvals

Environmental Assessments

The Ministry of the Environment and Climate Change (Ministry) is responsible for environmental assessments and approvals. These can have a direct impact on greenhouse gas emissions.

Under the *Environmental Assessment Act*, project owners must ensure that environmental assessments are completed for all government plans and projects. The assessments are intended to evaluate:

- the plan/project's environmental effects;
- alternatives to the plan/project; and
- any negative impact on the environment.

By approving environmental assessment policies, the Ministry has significant authority to influence many government planning processes.

For more information on environmental assessments, see our environmental assessments audit report later in this chapter (**Chapter 3, Section 3.06**).

Environmental Approvals

Under the *Environmental Protection Act*, the Ministry is also responsible for:

- ensuring that projected emissions into air from all projects (both private-sector and public-sector) do not exceed allowable standards set by the Ministry in regulation (by requiring that emitters obtain environmental approvals); and
- inspecting emitters to determine they are complying with the conditions of their environmental approvals.

Currently, inspections do not measure greenhouse gases. Instead, they focus on emissions that pollute the air, such as fine particulate matter (small polluting particles or droplets found in, for example, aerosols and fumes), nitrogen oxides and smog-causing compounds.

For more information on environmental approvals, see our environmental approvals audit report later in this chapter (**Chapter 3, Section 3.05**).

Appendix 7: The Environmental Commissioner of Ontario

The Environmental Commissioner of Ontario (Commissioner) is an independent officer of Ontario's Legislative Assembly. The office of the Commissioner was created under the *Environmental Bill of Rights* (EBR) in 1993. The Commissioner's job is to review and report on the government's compliance with the EBR.

In Ontario's 2007 Climate Change Action Plan (see **Figure 9**), the government committed to having the Commissioner provide an independent review of Ontario's progress in reducing greenhouse gas emissions.

In 2009, the government amended the EBR to require the Commissioner to report annually to the Legislative Assembly on "the progress of activities in Ontario to reduce emissions of greenhouse gases." This includes "a review of any annual report on greenhouse gas reductions or climate change published by the Government of Ontario." Under the EBR, the government is legally required to provide the Commissioner with such reports.

Since 2008, the Commissioner has reported annually to the Legislative Assembly on the progress of activities in Ontario in reducing greenhouse gas emissions.

Appendix 8: Considering the Costs of Carbon

Governments worldwide have recognized that carbon emissions, by entering the atmosphere, affect the entire planet. These effects, as discussed in **Section 2.1.3**, include a rise in sea levels, more droughts and heat waves, more intense and frequent hurricanes and storms, and increased precipitation in some regions and increased droughts or desertification in others. Given the impact of climate change, governments have acknowledged the need to find ways to put a value on carbon emissions. Three such ways include:

- Focusing on the global impact of carbon emissions, as measured by the **social cost of carbon**;
- Focusing on the cost to individuals or businesses to reduce emission to meet a certain target, measured by the **cost to reduce carbon emissions**;
- Establishing a **carbon price (pay to emit)** which is required by government for the emission of carbon (e.g., carbon tax or cap-and-trade system).

Social Cost of Carbon Emissions

All greenhouse gas emissions contribute to global warming. Recognizing the global impact of climate change, a "social cost" has been attributed to burning carbon. Such a cost is determined through a comprehensive assessment of the economic costs associated with the global damages of climate change, both now and in the future. According to the U.S. Environmental Protection Agency, these damages include a variety of impacts, such as agricultural productivity losses, impacts on human health, property damages from flooding and other extreme weather events, and changes in energy costs. The social cost of carbon represents the value to society of avoiding this damage, expressed in dollars per tonne of carbon dioxide reductions. Environment and Climate Change Canada calculated the social cost of carbon to be $43 per tonne of CO_2 avoided in 2017 and $46 per tonne of CO_2 avoided in 2020. Increasingly, policymakers are recognizing the need to include the social cost of carbon in their decision-making processes to ensure they factor in the full cost of emitting.

Cost to Reduce Carbon Emissions

The cost of reducing emissions, often referred to as the marginal abatement cost, represents how much an individual or business must spend in order to reduce one tonne of CO_2. The abatement may be achieved from switching to lower carbon fuels, changing manufacturing processes, or capturing the emissions before they are released into the atmosphere. Often abatement projects will need to be planned well in advance because they can involve the purchase of costly equipment and the implementation of new processes. This cost can be helpful for policy-makers to understand and to use in their calculations regarding how to meet their emission reduction targets. For example, a study commissioned by the Ministry of Ontario's emission-intensive industries indicated that a smaller reduction in emissions (0–10%) is often achieved through investments in energy efficiency, which may be less expensive. However, for some industrial facilities, achieving higher levels of reductions (20–30%) can be very costly as they may require changes to production processes or the implementation of new technology, as is the case with the steel industry. The study found that the average cost to reduce emissions by 10% range from $9 to $71 per tonne, whereas the average cost to reduce emissions by 20% to 30% range from $153 to $197. This cost can be used in determining at what level a carbon price may be effective. For example, if it costs a business $15 to buy the equipment to reduce one tonne of greenhouse gases, the carbon price applied by government would have to be equal to or greater than that in order to encourage that business to invest in the technology.

Carbon Price (Pay to Emit)

The third cost to consider is the price imposed on carbon emissions by a government, referred to as the carbon price. This can either be set directly by the government through a carbon tax or by a constructed market through the implementation of a cap-and-trade system. Until 2017, the price to emit carbon in Ontario was $0. It is estimated by the Ministry that the price of carbon between 2017, (when Ontario joins the linked cap-and-trade system with California and Quebec), and 2020 will range from $18 to $20 per tonne. For more information on the features of carbon tax and cap-and-trade systems, see **Figure 3**.

Ministry of Health and Long-Term Care and eHealth Ontario

Electronic Health Records' Implementation Status

1.0 Summary

The Ministry of Health and Long-Term Care (Ministry) began developing provincial technology infrastructure in 2002 with the creation of the Smart Systems for Health Agency. The functions of this agency, as well as a Ministry branch that previously worked on Electronic Health Record (EHR) application and clinical data management projects, were amalgamated into eHealth Ontario when it was created in 2008.

eHealth Ontario's mandate is to implement a system that, in addition to providing an EHR for every Ontarian, includes a data network that stores EHR data and makes it quickly and securely available to health-care providers.

An EHR is defined as a digital lifetime record of an individual's health and health-care history, updated in real time and available electronically to authorized health-care providers. An EHR system allows for the exchange of stored patient health information so that health-care professionals can quickly access patient data, thereby improving quality of care and creating efficiencies.

EHRs will replace physical records (on paper and x-ray film, for example) that are not always up to date or readily accessible to health-care providers, creating a potential for error and duplication.

In 2008, and again in 2010, the Ministry set 2015 as the target year for eHealth Ontario to implement a fully operational EHR system across Ontario. By then, although some EHR projects were up and partially running, a fully operational province-wide EHR system was not in place. The Ministry did not formally extend the 2015 deadline, but eHealth Ontario continued its work and expects to complete the remainder of its project-build work by March 2017. It is unclear when a fully operational EHR system will be available in Ontario.

We found that implementation of EHRs in Ontario has progressed over the last 14 years. For example, the Ontario Laboratories Information System contains a significant number of lab tests done in the province, and many community-based physicians have adopted Electronic Medical Records that replace patients' paper files.

While some individual systems have been developed to collect and provide specific types of patient health information, they do not have complete information and full functionalities, and there is still no provincially integrated system that allows easy and timely access to all this information.

This means that it is still not possible for all authorized health-care professionals to access complete health information (e.g., lab tests, drug information or x-rays) about a patient regardless of where in Ontario the patient received health

services. As well, not all physicians who have implemented Electronic Medical Record systems can connect to the provincial databases because of incompatible technology.

A fully operational EHR system depends on the participation of many health-sector organizations, including hospitals, community health agencies, community and hospital medical laboratories, and physicians in community practice, to input the necessary information for sharing. These organizations and professionals would each have invested in their local systems and, while some of these systems would exist even without the EHR initiative, many of these local systems contain health information needed for the provincial EHR systems. Without these local systems and the health information they contain, eHealth Ontario cannot achieve the goal of an EHR initiative.

While the Ministry has a good understanding of the spending on EHR projects managed directly by eHealth Ontario, it has not tracked the total spending on the EHR initiative incurred by other health-care organizations. Spending on projects not managed directly by eHealth Ontario includes, for example, systems used in hospitals and family doctors' offices that contain patient health information.

We used information that the Ministry maintains, along with data we gathered directly from a sample of health-care organizations, to estimate that the cost incurred so far (from 2002/03 to 2015/16) to enable the completion of EHRs across the province is approximately $8 billion.

Because the EHR initiative is still not complete, and lacks an overall strategy and budget (the Ministry only established a budget for eHealth Ontario's portion of the initiative), the Ministry does not know how much more public funding is still needed before the initiative is considered effectively implemented.

Given the continuing importance of having EHRs for the benefit of Ontarians and the health-care system, it is understood that a significant investment of taxpayer funding is needed to realize benefits to patients and health-care professionals from a provincially integrated EHR system. However, it is equally important that an overall strategy and related budget be in place to ensure that the EHR initiative is appropriately managed and that the intended benefits are achieved in a cost-effective and timely manner.

In addition to the need for a long-term strategy and budget for the remainder of the EHR initiative, it is very important to have full participation of and usage by health-care organizations and professionals because they create clinical information and rely on it to provide quality care to Ontarians. Because most of these organizations and professionals are not accountable to eHealth Ontario, the agency has been unable to fully persuade all parties to contribute clinical information to the EHR systems. As a result, some of the systems that were up and running as of March 2016 contained limited and/or incomplete patient information.

Our specific findings include:

- **More work is needed to enable a functional EHR supported by a province-wide network**—Although approximately $8 billion has been spent so far to enable a functional EHR, parts of the EHRs are still not completely in use and others are only partially functional. This spending covers a 14-year period between 2002/03 and 2015/16, and includes eHealth Ontario's project costs and EHR-related costs incurred in the broader health sector. eHealth Ontario and its predecessor agency spent $3 billion of the total, the Ministry and its funded agencies such as Cancer Care Ontario spent $1 billion, and provincially-funded local health-care organizations such as hospitals and Community Care Access Centres spent about $4 billion. The monies spent covered information technology, the accumulation of information and integrated services required in health-care organizations for sharing through the EHR systems.
- **No overall strategy and budget to guide the implementation of the entire EHR initiative**—In addition to seven eHealth Ontario

EHR projects (i.e., Ontario Laboratories Information System; Diagnostic Imaging; Integration Services; Drug Information System; Diabetes Registry; Client, Provider and User Consent Registries; and Client, Provider and User Portals), money is also spent on other projects in the EHR initiative by other health-care organizations through their annual budgets. These publicly funded health-care organizations include hospitals and Community Care Access Centres. The province has not established an overall strategy to guide the work of eHealth Ontario and all other health-sector organizations that must work together to enable a fully functioning EHR system in Ontario. As well, there is also no overall budget for all EHR projects and EHR-related activities undertaken in Ontario.

- **As of March 2016, a year after its deadline passed, seven core projects managed by eHealth Ontario were still within budget but only about 80% complete**—In a June 2010 mandate letter, the government assigned eHealth Ontario 12 EHR projects to be completed by 2015, including seven regarded as core. The government officially approved about $1 billion for the seven core EHR projects under the responsibility of eHealth Ontario, and required the projects to be completed by 2015 (with the exception of the drug information system, which had a 2016 deadline). The actual spending on these seven projects at the time of our audit was within budget. However, in March 2016, eHealth Ontario estimated that it had completed 77% of the seven core assignments. That percentage rises to 81% after taking into account that the scope of some projects changed since 2010 while others were cancelled or reassigned. eHealth Ontario says it expects to fully complete its work within budget to build the EHR systems by March 2017.
- **eHealth Ontario lacks the authority to require all health-care providers to upload data and the Ministry has not used its authority to require it**—Many factors account for eHealth Ontario's difficulty in completing projects on time. One significant factor is that it has no control over what most health-care organizations do with their own data systems. In effect, eHealth Ontario is mandated to connect these systems, but it has not been given the authority to require organizations to upload necessary clinical information into its EHR systems. As well, the Ministry has not required health-care organizations to participate in the EHR initiative.
- **eHealth Ontario-managed projects contain incomplete data**—Four specific eHealth Ontario projects that we reviewed that were available for use as of March 2016 still lacked some promised features and contained incomplete data. For example:
  - The **Ontario Laboratories Information System**, a database designed to include lab tests done in hospitals, community labs and public health labs, did not have three of the five promised functionalities working at the time of our audit. As a result, health-care professionals were not able to electronically order lab tests for patients, retrieve lab orders, or refer lab tests to other sites or labs if the receiving lab could not conduct the tests. In addition, the database did not contain about 40 million tests, including some conducted either in physician offices or labs in certain hospitals and the community that were not yet contributing to the database, and all those not paid for by the Ontario Health Insurance Plan.
  - The EHR system includes four regional **Diagnostic Imaging databases** across the province to store images such as x-rays and CT scans, and related reports. However, 60% of privately owned imaging clinics do not use digital equipment and so were

unable to upload the 5.4 million patient images they create each year. In addition, health-care professionals can only access the imaging database in the region where they practise.

- **$71 million spent on a Diabetes Registry (one of the seven core projects) that was then cancelled**—As part of the EHR project, eHealth Ontario and the Ministry spent $71 million on a province-wide Diabetes Registry, which was to contain information to help treat the growing number of Ontarians with diabetes. However, eHealth Ontario terminated the project in 2012 before it was complete. In our 2012 audit of the Diabetes Management Strategy, we indicated that factors contributing to the cancellation included delays in procuring a vendor and quality issues in the Registry. The $71-million total includes costs associated with an arbitration award to the company developing the Registry after both parties agreed to arbitration.
- **A fully-functional Drug Information System (one of the seven core projects) is not available and is four years away from completion**—The drug information system is used to track dispensed and prescribed medications of all Ontarians. eHealth Ontario was originally responsible for this project, but did not complete it. The Ministry assumed direct responsibility for the project in 2015. By March 2015, the Ministry and eHealth Ontario had spent a combined $50 million on the project. The Ministry has since redesigned the project and expects to complete it by March 2020. It plans to spend an additional $20 million on the first phase, but has given no cost estimate to complete the entire project. As of March 2016, the drug database did not contain information for about 60% of the Ontario population.
- **Utilization of clinical information by health-care professionals below expected levels and measurement of system usage was inconsistent**—eHealth Ontario reports that many of its systems that have gone online are being actively used, but its definition of "active" was less than stringent. We therefore question whether the utilization rate was actually satisfactory. For example, only 13% of registered users in the Greater Toronto Area accessed lab results and diagnostic images from a web-based viewer in April 2016, compared to a target of 20%. Different systems and databases were subject to different definitions of active use—in some cases, eHealth Ontario reported as "active" someone who used the system once every six months.

Subsequent to our audit, Canada Health Infoway (an organization composed of deputy ministers of health from across Canada) issued a report on October 7, 2016, done at the request of the Ontario Ministry of Health and Long-Term Care, which had asked for an assessment of Ontario's progress on digital health's availability, use and benefits, and how Ontario compares to other provinces and territories.

The report concluded that Ontario is well positioned relative to its peers in terms of availability, use and benefits from investments in digital health solutions. The report also estimated that in 2015, the benefit to Ontario from selected digital health projects was $900 million. The benefits estimate was, for the most part, calculated using a population-based allocation of cross-Canada overall benefits.

Also on October 7, 2016, the Minister of Health and Long-Term Care asked the Premier's business adviser to assess the value of Ontario's digital health program, its assets and all related intellectual property and infrastructure.

Our report contains 12 recommendations, consisting of 23 recommended actions, to address our audit findings.

OVERALL MINISTRY RESPONSE

The Ministry of Health and Long-Term Care (Ministry) thanks the Auditor General and welcomes her recommendations as important

inputs to strengthen Ontario's investment and operations of health-care information technology systems, including the patient's Electronic Health Record component.

The Ministry has a mandate to steward the health system, which includes systems used to run Ontario's 156 hospitals, systems used by thousands of local community and public health-care providers, and systems used to support the secure exchange of digitized clinical information to ensure the best health outcomes for Ontarians.

The audit covers the 14-year period (2002-2016) representing a time of dramatic change in health care and technology, and supported by the Ministry's investment of $8 billion in these systems and their daily operations. According to Canada Health Infoway, Ontario is well positioned relative to its peers in terms of availability, use and benefits from investments in digital health solutions, and, in 2015, Ontario benefitted $900 million from selected digital health projects. This investment represents 1.4% of the Ministry's total spend, which is lower than the approximate 4% technology spending in the United States' private health-care sector in 2010 (a year representing the middle range of the period audited).

As the foundational EHR projects approached completion, the Ministry established a governance structure to oversee the development of its renewed strategy—the Digital Health Strategy (Strategy). The Strategy, nearing completion, is built on previous Ministry-commissioned reviews and consultation with numerous province-wide stakeholders. Once approved, the Strategy will clearly outline reporting mechanisms and roles and responsibilities of delivery partners. It will address the need to leverage industry-adopted standards for secure information exchange and for value-driven innovations.

The Auditor General's recommendations are critical to refining our Strategy and ensuring it is robust. We look forward to working with Ontarians to make our health system one of the most integrated, patient-centred, modern, and sustainable health-care systems in the world.

OVERALL RESPONSE FROM eHEALTH ONTARIO

eHealth Ontario thanks the Auditor General for her observations about the progress made in the health-care technology domain and her recommendations. After addressing early challenges, the foundation of the patient's electronic health record now exists. Today, more than 84,000 clinicians are registered to use the EHR across 80% of the province's population, with plans to connect the remaining 20% within the next few months. eHealth Ontario expects this work will be done within budget.

Building and sustaining the EHR for 13 million people is the primary focus of eHealth Ontario. Health care has continuously improved with the adoption of technology across the entire health-care system; some, not all, related to the EHR implementation. Previously, in the 2009 Auditor General's Special Report, eHealth Ontario's project costs were appropriately the reference point for both cost and value. Today, the value of all these investments cannot be captured in the benefits of the EHR alone, as noted by the Auditor General's inclusion of these broader health systems and their costs in her report.

Every month, clinicians' access millions of patient records in the EHR. In the last year alone, over 138 million lab reports were viewed across multiple labs, in a "trended" way with anomalous results flagged. This example demonstrates the true value of the EHR now and into the future.

The value will continue to grow as the use of the EHR matures and the foundational elements are completed. Together with the Ministry, eHealth Ontario looks forward to addressing the Auditor General's recommendations and to

advance health care in Ontario through secure sharing of this clinically relevant information with the province's thousands of authorized health-care professionals.

2.0 Background

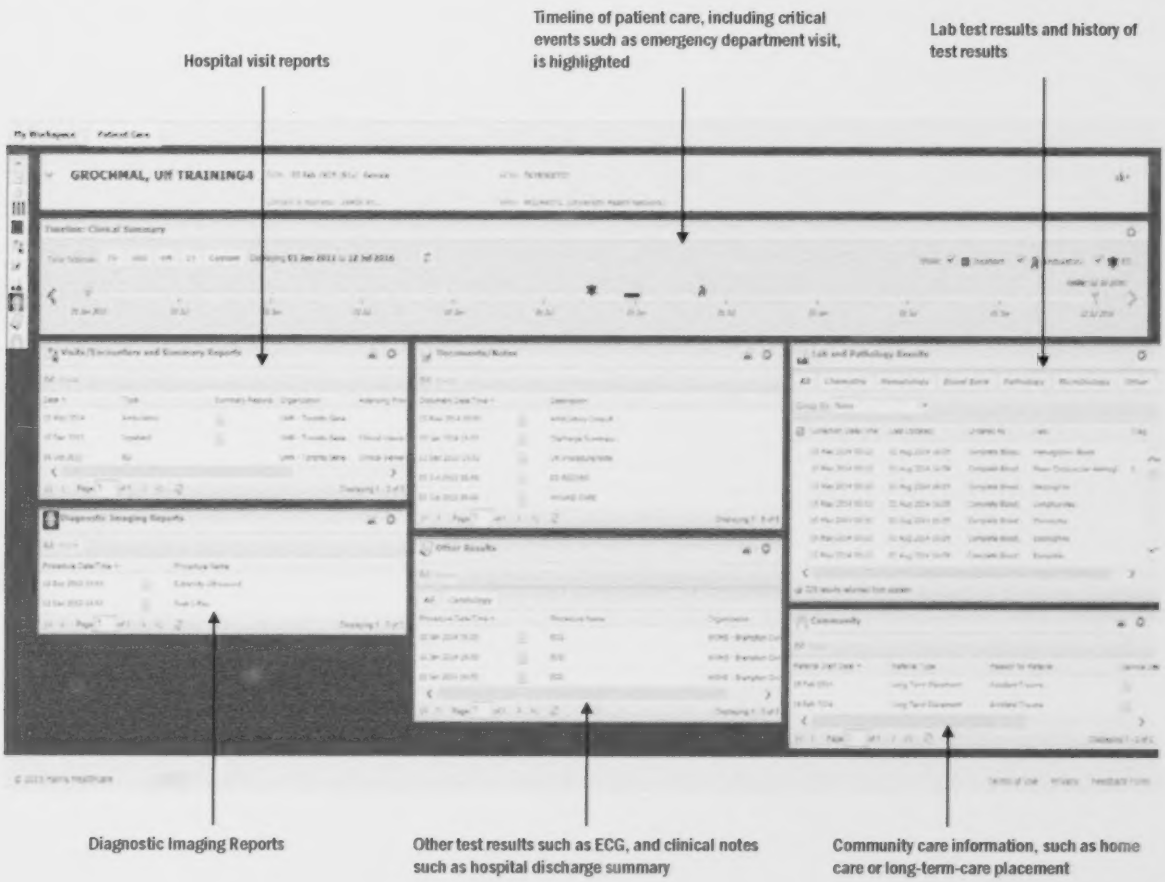
2.1 What is an Electronic Health Record?

The federal agency that works with the provinces and territories to co-fund digital health projects defines an Electronic Health Record (EHR) as "a secure and private lifetime record of an individual's health and health-care history, available electronically to authorized health-care providers." See **Figure 1** for a sample EHR.

The scale of a project that aims to create EHRs for the entire population is enormous, and the electronic health environment in Ontario is extremely complex: Ontario has about 300,000 health-care professionals—such as family doctors, specialists, pharmacists, imaging technicians and so on—who care for nearly 14 million people. As well, multiple individual local electronic health systems (known as point of care systems) that store health information already exist.

In Ontario, a patient's health information is securely stored in a variety of places, including

Figure 1: View of a Sample Electronic Health Record Used by Health-Care Professionals in the Greater Toronto Area
Sources of data: eHealth Ontario


Hospital visit reports
Timeline of patient care, including critical events such as emergency department visit, is highlighted
Lab test results and history of test results
GROCHMAL, UH TRAINING4
Diagnostic Imaging Reports
Other test results such as ECG, and clinical notes such as hospital discharge summary
Community care information, such as home care or long-term-care placement

the Ontario Laboratories Information System that stores lab test results for fluids and tissue; hospital information systems that contain information on patient care provided in hospitals; independent clinics that do diagnostic imaging tests such as CT scans and x-rays; Ministry systems that store prescription-drug data for Ontarians on provincial drug programs; computer systems in doctors' offices and pharmacies that store prescription records; and physicians' offices, where many doctors have their own local, stand-alone systems to log details of interactions with patients.

Each year, health-care professionals generate millions of patient medical records, many of them on paper, x-ray film and the like, which can be difficult to access by health-care professionals not working where the records are stored. Those records that do exist in digital form are often stored in a plethora of different and often incompatible computer systems used by health-care professionals, hospitals, and so on—meaning patient records cannot always be readily shared outside the facility that produced them. And even if the patient records could be shared, it would be necessary to ensure that only authorized health-care professionals can access them.

EHRs' objective is to address these issues. Once fully implemented, an EHR system will have complete information on lab test results, diagnostic images and reports, medication profiles and key medical reports such as hospital discharge summaries and immunization history, and will make such information available to all authorized health-care professionals in real time as they care for their patients.

Consider the hypothetical case of a Nipissing resident who becomes ill during a visit to Toronto. She goes to the St. Michael's Hospital emergency room in Toronto, where the attending physician orders a blood test that is analyzed at a lab in Toronto. The visitor then returns to Nipissing and sees her own family doctor. Without an EHR, the patient would need to tell her doctor about the lab test in Toronto, and the doctor would then either contact the Toronto physician to get the test results, or request a second blood test in Nipissing. With an EHR, however, the doctor in Nipissing using a certified Electronic Medical Record system would be able to see the results of the Toronto blood test, as well as receive the hospital report documenting the visit, thus potentially preventing the patient from taking an unnecessary duplicate blood test or repeating information.

Another term often used interchangeably with EHRs is Electronic Medical Records, but this term means something different. Electronic Medical Records are defined as office-based records that allow a health-care professional such as a family doctor to electronically record information gathered during a patient's visit. This could include weight, blood pressure and other medical information that would previously have been handwritten and stored in a file folder. Electronic Medical Records that are certified to meet provincial standards will allow the doctor to connect to a patient's complete health record, including information stored in the EHR by other health-care professionals.

This audit report will apply the above definitions to discuss the implementation of EHRs and Electronic Medical Records.

2.2 History of Implementation of Electronic Health Record Initiative in Ontario

In September 2000, federal and provincial health ministers committed to develop an EHR system, and the federal government created Canada Health Infoway (Infoway) the following year to accelerate the process across the country.

Infoway's goal was to provide compatible EHRs for 50% of Canadians by 2010, and to all Canadians by 2016. It reported in its 2015/16 annual report that four of six key areas were available as of March 31, 2016: client registry; clinical reports; diagnostic imaging and provider registry, and was working toward having complete lab and drug information available for all Canadians.

In Ontario, work on provincial technology infrastructure, among other activities, began in 2002 with the creation of the Smart Systems for Health Agency, which was replaced by eHealth Ontario in 2008. (See **Appendix 1** for a timeline of key EHR events in Ontario.)

eHealth Ontario's objectives are to provide eHealth services and related support for the effective and efficient planning, management and delivery of health care, while developing the supporting strategy and operational policy and ensuring the privacy of individuals whose information is transmitted, stored or exchanged by and through the agency. To meet the objectives, eHealth Ontario must plan, deliver and manage an EHR system that provides secure storage and sharing of patient medical information with authorized health-care professionals in Ontario.

The agency is accountable to the Ministry of Health and Long-Term Care (Ministry) through a Memorandum of Understanding and an Accountability Agreement that set out expectations for the operational, administrative, financial, staffing, auditing and reporting arrangements between the Ministry and eHealth Ontario.

As of March 31, 2016, eHealth Ontario employed 763 staff, compared to about 700 people (about 400 staff and 300 fee-for-service consultants) in 2009. These 300 consultants were originally retained by the Ministry's former eHealth Program Branch, which outnumbered the 30 full-time Ministry employees, an issue we noted in our 2009 special audit. The Branch was amalgamated into eHealth Ontario when the agency was created in September 2008, and the number of consultants had dropped to just 13 at the time of our current audit.

eHealth Ontario's staff work in areas such as project management, system architecture, management of agreements with health-care organizations, and information-technology services.

eHealth Ontario has had to work closely with a wide range of organizations in the health-care sector—hospitals, for example, and community-based health-care providers—that each have their own governance structure, and therefore different priorities and needs, resulting in the use of different data systems to meet their needs.

In addition, other stakeholders that influence eHealth Ontario's work include Local Health Integration Networks (LHINs), Infoway, health-sector associations (such as the Ontario Hospital Association, the Ontario Medical Association, the Registered Nurses Association of Ontario, and the Ontario Pharmacists Association) and professional colleges (such as the College of Physicians and Surgeons, and the College of Nurses of Ontario). Some of these working relationships are defined in contractual agreements that specify funding, the work to be done and reporting requirements.

2.3 eHealth Ontario's Scope of Work to Create Electronic Health Records

The Ministry envisions a seamless EHR system that stores and/or allows access to all patient records and health information online, securely, to authorized health-care professionals. The intent is for all Ontarians to eventually have access to their own EHRs.

In order to achieve this, an EHR system requires four fundamental components:

- patient data, such as treatment history, lab test results, diagnostic images, and prescribed medications, in digital form;
- a secure network on which to store and move this digital data;
- applications that enable authorized users to record, store and retrieve the data; and
- terminals or access points from which users can input and retrieve the data.

In order to achieve its main mandate, eHealth Ontario must build dedicated province-wide databases, both repositories and registries. Repositories store health information such as lab test results and drug prescription information. Registries contain listings of authorized health-care professionals,

patients (including those who have opted out of having their information in the system), and other users such as researchers who may need access to non-identifying patient information.

These repositories and registries must also be able to connect, through a network, to existing systems of different health-care organizations in a variety of settings—for example, local physician office, hospital and community care—to enable health-care professionals to access patient information stored outside their own organization's system.

In May 2008, Cabinet approved the first Ministry-prepared EHR strategy. Subsequently, in 2009, eHealth Ontario, under the authority of a regulation made under the *Development Corporations Act*, developed a more detailed EHR strategy that is overall in line with the 2008 Cabinet-approved strategy, covering the years 2009 to 2012.

The 2009 to 2012 eHealth strategy set out specific clinical and foundational priorities expected to be achieved by March 2015 with costs to fall within the 2009 Ontario budget commitment of about $2 billion. The clinical and foundational priorities included:

- three clinical health priorities—a diabetes registry, a drug information system and a wait-times strategy—to create "quick wins" to demonstrate immediate clinical value to health-care providers and Ontarians; and
- foundational priorities—the centralized repositories and registries of users and clinical data—to support these clinical priorities.

After this strategy was developed, the Ministry directed eHealth Ontario in a June 2010 mandate letter to focus its efforts on 12 projects essential to implementing an EHR. The letter confirmed the target completion date of 2015 for the overall initiative. Six of the 12 projects were aligned to core projects that Infoway was also co-funding and working on with Ontario and the other provinces and territories.

Of these 12 projects, the government designated seven as core in its submissions to Cabinet in December 2010. These core projects were also identified as important projects in the government's 2008 eHealth strategy.

Figure 2 shows a list of these 12 projects, including the seven core projects. Detailed descriptions of all 12 projects are provided in **Appendix 2**. The Cabinet submissions in 2010 reconfirmed March 2015 as the overall completion date for most of the EHR initiative, except for the drug information system, which had a March 2016 deadline. The submissions also included a revised approach that stipulated that system integration would be done first at the regional level and then linked province-wide to make implementation easier and more economical.

2.4 Funding to eHealth Ontario

Between 2009/10 (the time of our last audit of the EHR initiative) and 2015/16, eHealth Ontario received an average of $370 million a year from the Ministry. Funding over this period decreased by 7%, from $352 million in 2009/10 to $329 million in 2015/16.

3.0 Audit Objective and Scope

The objective of our audit was to assess whether eHealth Ontario, in conjunction with the Ministry of Health and Long-Term Care (Ministry), had effective governance, systems and procedures in place to ensure that Electronic Health Records (EHRs) were implemented in accordance with requirements and adopted for use and that status of implementation and adoption is appropriately measured and reported on.

A significant portion of our work related to assessing whether the Ministry and eHealth Ontario achieved the overall EHR strategy. In making this assessment, we reviewed in detail the implementation status of the following selected key EHR projects, which had either the greatest level of progress or had ended:

Figure 2: Electronic Health Record Projects in Ontario Funded by the Ontario and Federal Governments

Sources of data: eHealth Ontario and the Ministry of Health and Long-Term Care

Projects	Required as per 2010 eHealth Ontario Mandate Letter from the Minister of Health and Long-Term Care	Required as per Government Commitment	Aligns with Similar Nationwide Projects Co-Funded by Canada Health Infoway
Ontario Laboratories Information System*	√	√	√
Diagnostic Imaging*	√	√	√
Integration Services*	√	√	√
Drug Information System*	√	√	√
Diabetes Registry*	√	√	X
Physician eHealth	√	√	X
Client, Provider, User Consent Registries*	√	√	√
Client, Provider, User Portals*	√	√	X
Consumer eHealth	√	√	X
Panorama	√	√	√
Chronic Disease Management	√	X	X
Technology Services	√	√	X
Total	**12**	**11**	**6**

Note: Refer to **Appendix 2** for description of projects.

* The Ontario government considers these seven projects as "core" in its 2010 commitment.

- the Ontario Laboratories Information System;
- the Diagnostic Imaging System, including the central and regional repositories;
- the Diabetes Registry;
- the Drug Information System (now called the Digital Health Drug Repository);
- community-based physicians' Electronic Medical Records; and
- the Integration Services project (work required for connectivity of various information systems; now called the Connecting Hubs).

Our audit fieldwork was conducted over the period of November 2015 to May 2016. We conducted most of our audit work at eHealth Ontario's offices in Toronto. At eHealth Ontario and at the Ministry, we reviewed relevant documents and interviewed senior management and staff.

To gain an understanding of stakeholders' roles and responsibilities, and to obtain their perspectives, we interviewed management at selected health-care organizations, including community and hospital laboratories, hospital and primary-care physicians, professional associations such as the Ontario Hospital Association, the Ontario Medical Association and its OntarioMD subsidiary, and the College of Physicians and Surgeons of Ontario. We also spoke to the Ontario Pharmacists Association, the Ontario College of Pharmacists, the Registered Nurses Association of Ontario, and the College of Nurses of Ontario.

We obtained financial information from a sample of hospitals, the Ontario Association of Community Care Access Centres, and Cancer Care Ontario in order to better understand EHR-related spending in the broader health sector.

In addition, we interviewed a sample of specialist physicians, and we surveyed a sample of physicians in Ontario on their use of the various EHR projects. Thirty-five percent of the surveyed physicians responded to this survey. We also spoke to representatives from Canada Health Infoway (the

organization created by the federal government in 2001 to help provinces develop EHRs), Cancer Care Ontario, and the Institute for Clinical Evaluative Sciences.

Further, we interviewed representatives from the three Connecting Hubs—three large hospitals that administer the connectivity work under contract with eHealth Ontario to enable health-care professionals to access patient information contained in various electronic information systems—to gain an understanding of the hubs' capabilities. Additionally, we interviewed management of the four regional Diagnostic Imaging repositories, which store images such as x-rays, CT scans and MRIs. We also spoke with management at a sample of Local Health Integration Networks to get an understanding of their roles and responsibilities related to the EHR initiative.

3.1 Subsequent Events

Subsequent to our audit, Canada Health Infoway (an organization composed of deputy ministers of health from across Canada, including Ontario's) issued a report on October 7, 2016, done at the request of the Ontario Ministry of Health and Long-Term Care, which had asked for an assessment on Ontario's progress on digital health's availability, use and benefits, and how Ontario compares to other provinces and territories.

The report concluded that Ontario is well positioned relative to its peers in terms of availability, use and benefits from investments in digital health solutions. The report also estimated that in 2015, the benefit to Ontario from selected digital health projects was $900 million. The benefits estimate was, for the most part, calculated using a population-based allocation of cross-Canada overall benefits.

Also on October 7, 2016, the Minister of Health and Long-Term Care asked the Premier's business adviser to assess the value of Ontario's digital health program, its assets and all related intellectual property and infrastructure.

4.0 Detailed Audit Observations

4.1 Lack of Provincial Strategy and Leadership to Guide Ongoing eHealth Work

4.1.1 Province Has Been Without a Comprehensive eHealth Strategy

As discussed in **Section 2.3**, the Ministry received approval from Cabinet in 2008 to execute an eHealth strategy, with a goal to establish an EHR for every patient in Ontario by 2015. Following that Cabinet-approved strategy and under the authority of the regulation that created it, which gave it the authority "to develop an eHealth services strategy", eHealth Ontario developed a more detailed strategy, titled "Ontario's eHealth Strategy 2009-2012", covering those three years.

In this same time period, in a 2010 mandate letter to eHealth Ontario, the Ministry noted that it would jointly develop an EHR strategy with the agency (over the summer of 2010) covering the period up to 2015. This updated strategy was to have been presented to Management Board of Cabinet by September 2010. We also recommended in our 2009 special audit of the EHR Initiative that the agency develop a comprehensive strategic plan that specifically addressed EHR targets and laid out a path to implementation by 2015. In December 2010, the Ministry submitted a strategic overview document to Cabinet covering the period to 2015, detailing the plans on the core EHR projects. However, the strategic overview did not include any other projects that could be related to the development of EHR but that are managed by health organizations other than eHealth Ontario. The Ministry indicated that it was not required to include projects managed by these health organizations in the strategic overview submission to Cabinet.

At the direction of the Ministry, eHealth Ontario developed and released an EHR "connectivity

strategy" in July 2015 to describe how health-care information will be connected to provide a provincially-integrated EHR in the future, as shown in **Figure 3**.

According to the connectivity strategy, in the future, patients in Ontario can expect to electronically view their health information on their own personal computers, and health-care professionals and researchers can expect to monitor and manage the care of certain patient populations using health data contained within the EHR. Regarding the latter, for instance, health-care professionals in Hawaii used their EHR to monitor the health of the entire state's chronic kidney disease patients.

eHealth Ontario developed and released a blueprint in 2015 that provides a high-level view of the various components of an EHR once the connectivity strategy is achieved.

However, neither the connectivity strategy nor the blueprint provides detailed timelines for when components or capabilities will be available across the health sector.

With the lack of a comprehensive provincial strategy, maintaining stability at the senior management level is critical to help ensure clarity and focus on achieving the agency's objectives, and enable progress toward goals. At the time of our audit, eHealth Ontario's CEO was the agency's seventh since its inception in 2008. In fact, the agency had been under the leadership of an average of one CEO or acting CEO per year, with the actual tenure of each ranging from three months to three years. The current CEO joined eHealth Ontario in September 2014.

Such frequent change in leadership poses risks of lowered employee morale, and loss of continuity with stakeholders, thus causing confusion and uncertainty; all of which may have contributed to delays in completing EHR projects and meeting planned goals.

In response to these concerns, the Ministry has taken responsibility to establish a new provincial EHR strategy, and began this work in 2014/15. At the time of our audit, the Ministry was in the process of developing the strategy based on consultations and feedback from health-sector stakeholders.

The Ministry said one of the key items it will include in the new strategy is the completion of

Figure 3: Contents and Functions of Selected Electronic Health Record Systems in Ontario in the Future

Prepared by the Office of the Auditor General of Ontario, compiled from eHealth Ontario's *An Overview of Ontario's EHR Connectivity Strategy, The Vision for 2015 And Beyond*

Type of EHR	Contents and Functions Anticipated in the Future
Labs	• All reports from hospital, community and public labs. • Primary-care physicians can submit lab orders to the Ontario Laboratories Information System.
Drugs	• All medication dispense information for all Ontarians. • Primary-care physicians can send prescriptions electronically to pharmacies.
Diagnostic imaging	• Provincial diagnostic imaging reports and images available through regional viewers and through physician offices' electronic medical record systems.
Physicians' Electronic Medical Records	• Integrated with other EHR systems such as labs and diagnostic imaging systems. • Physicians can send documents and data to provincial repositories and registries. • Physicians can receive electronic referrals from EHR systems. • Electronic referrals from primary-care physicians to other specialist physicians.
Community care	• Patient health information in community agencies such as Community Care Access Centres and community support services agencies integrated with provincial EHR.
Hospital data	• All hospital reports available to health-care professionals through provincial repositories. • Patients can access their own clinical data and documents.

work required in the Cabinet-approved projects in the EHR strategy. The new strategy will also consider patients' access to their own data, and financial sustainment of the systems in place.

The Ministry informed us that it expected to submit a revised provincial EHR strategy to Cabinet for approval by late 2016. As well, on October 7, 2016, the Minister requested the Premier's business adviser to assess the value of Ontario's digital health program, its assets, and all related intellectual property and infrastructure.

4.1.2 Governance Model Did Not Fully Address Accountability Relationships in the Health Sector

Given the complex electronic health environment in Ontario as discussed in **Sections 2.1** and **2.2**, eHealth Ontario cannot work alone to implement EHR. In fact, the then Minister of Health and Long-Term Care noted in her mandate letter to the agency in 2010 that the agency was the "principal partner in delivering an EHR". According to eHealth Ontario's 2009-2012 strategy, the agency was the single point of accountability, responsible for aligning all publicly funded EHR projects to build a comprehensive system by March 2015.

Similarly, the government's 2008 strategy set out the various information systems and types of data to be included into the EHR such as a drug information system, lab information, diagnostic imaging and reports, as well as clinical viewers (web-based access) for use by health-care professionals.

However, the roles and responsibilities were not defined in the government's May 2008 strategy, eHealth Ontario's 2009-2012 strategy, the eHealth Ontario 2015 Blueprint and connectivity strategy, or anywhere else, for the many parties involved in the collective effort to develop a fully functioning EHR system by March 2015.

To achieve the government's goal of having an EHR for all Ontarians by 2015, eHealth Ontario must work with other provincial organizations such as Cancer Care Ontario, regional bodies such as the LHINs, local groups such as hospitals, and private-sector organizations such as independent health facilities that also operate their own electronic health information projects. Although eHealth Ontario was accountable to the Ministry, only some health-care organizations were accountable to eHealth Ontario through partner agreements. Most other health-care organizations made their own decisions through their internal governance structure to implement electronic solutions to meet their needs, which may not necessarily have advanced progress towards the provincial EHR goal.

In 2013, the Ministry and eHealth Ontario's board of directors asked two former Ontario public servants to undertake a strategic review of eHealth Ontario and the provincial EHR strategy. In their 2014 report, the consultants noted that the strategy was broad and did not provide a clear description of the specific roles of the various participants. They further noted that the Ministry would be best suited to lead the provincial strategy.

In 2016, eHealth Ontario underwent a mandate review as required by the province's Agencies and Appointment Directive. In the April 2016 report resulting from this review, another external consultant also identified the lack of clarity in the roles of both the Ministry and the agency. The consultant also noted that the Ministry should carry the responsibility for developing the eHealth vision and strategy, and establishing priorities.

As previously noted, at the time of our audit, the Ministry had taken the lead in developing the next EHR strategy, which was not yet finalized.

RECOMMENDATION 1

To ensure that all parties are held accountable for their responsibilities, the Ministry of Health and Long-Term Care should clarify and document the roles and responsibilities of all parties in the development of relevant projects in the next version of its Electronic Health Record strategy.

MINISTRY RESPONSE

The Ministry welcomes this recommendation and is pleased to receive advice and recommendations from the Auditor General in this area. As noted by the Auditor General, the Ministry is developing its Digital Health Strategy (Strategy), which will be informed by the Auditor General's findings and recommendations for this audit. The Strategy will be built on previous Ministry-commissioned reviews of these topics and consultation from numerous stakeholders across the province. The cornerstone of the Strategy is its governance structure, which will clarify the optimal roles and responsibilities of delivery partners including, for example, eHealth Ontario, the Ministry, LHIN-funded health-care organizations and Ministry-funded health agencies.

4.2 Significant Funding Provided to Implement Electronic Health Records

4.2.1 Publicly-Funded Health Agencies Spent $8 Billion Over 14 Years on EHRs and EHR-Related Systems and Activities

The Ministry, through eHealth Ontario, the agency's predecessor, and other Ministry-funded health organizations, spent more than $4 billion over the 14 years between 2002/03 and 2015/16 on EHR systems and EHR-related activities. It also provided another $4 billion, through the Local Health Integration Networks, to various health-care organizations to fund their own local information technology systems that contain patient health information necessary for sharing in the EHR systems. **Figure 4** shows a breakdown of the amount spent.

The Ministry considered these projects and activities to be part of the eHealth initiative in its internal discussion in 2015 to the eHealth Investment and Sustainment Board (Board). The Board was formed in March 2015 by the Ministry to provide advice to the Minister on the development of the new electronic health records strategy and to assist in monitoring its successful implementation. The new strategy was not yet finalized at the time of our audit.

During the same 14-year period, the federal government paid the Ontario government about $190 million towards its provincial spending.

eHealth Ontario and Smart Systems for Health Agency Expenditures

Both eHealth Ontario and its predecessor agency, Smart Systems for Health Agency, spent over $3 billion in a 14-year period from 2002/03 to 2015/16 to implement eHealth projects. Included in this amount are $1 billion spent on the seven core projects as described in **Section 2.3** and $2 billion spent on the development of a provincial technology infrastructure, among other activities, to support the EHR system and corporate costs.

Ministry-Funded Projects' Expenditures

From 2002/03 to 2015/16, the Ministry spent over $1 billion on eHealth projects that it is responsible for. These projects include the Ontario Telemedicine Network, Panorama—the province's immunization record system—Cancer Care Ontario, and payments the Ministry made to primary-care physicians to implement local Electronic Medical Record systems.

EHR-Related Information Technology Expenditures of Local Health-Care Organizations

eHealth Ontario is tasked with building data repositories and allowing various health-care professionals to connect to these databases to get a complete understanding of a patient's health story. As discussed in **Section 2.1**, health records reside in many local point-of-care systems such as those in LHIN-funded hospitals or Community Care Access Centres (CCACs). While some of these

Figure 4: Public Funding to Enable Electronic Health Records in Ontario, 2002/03–2015/16

Source of data: eHealth Ontario, the Ministry of Health and Long-Term Care, Cancer Care Ontario, Ontario Association of Community Care Access Centres, and selected hospitals

	Annual Spending ($ million)									
	2002/03–2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	14-Year Total
Ministry-Funded										
Core Projects										
Integration Services	–	7	11	17	46	41	47	80	79	**328**
Diagnostic Imaging	44	25	32	21	20	20	13	27	21	**223**
Ontario Laboratories Information System	89	8	14	14	19	26	19	17	10	**216**
Client, Provider, and User Consent Registries	–	19	15	15	15	21	15	12	11	**123**
Diabetes Registry	–	5	5	12	18	4	2	22	3	**71**
Drug Information System	13	5	5	2	10	9	5	2	5	**56**
Client, Provider, and User Portals	–	4	4	4	2	2	1	1	1	**19**
Subtotal	**146**	**73**	**86**	**85**	**130**	**123**	**102**	**161**	**130**	**1,036**
eHealth Ontario and Predecessor Agency[1]										
Smart Systems for Health Agency	647	225	–	–	–	–	–	–	–	**872**
eHeath Ontario	–	–	221	197	201	186	187	181	169	**1,342**
Subtotal	**647**	**225**	**221**	**197**	**201**	**186**	**187**	**181**	**169**	**2,214**
Other Ministry-Funded Projects										
Electronic Medical Records - OntarioMD	–	–	49	75	75	70	56	50	35	**410**
Cancer Care Ontario[2]	102	31	25	32	39	27	36	40	37	**369**
Ontario Telemedicine Network	–	27	29	32	40	48	49	51	57	**333**
Ontario Association of CCACs[2]	54	13	13	13	13	13	13	16	16	**164**
Electronic Child Health Network	28	10	9	8	8	8	8	8	8	**95**
eHealth Investment and Strategy Branch	21	5	2	1	1	1	1	1	3	**36**
Panorama	–	–	–	1	3	8	9	9	5	**35**
Implementation, adoption and other eHealth initiatives	–	19	3	–	–	–	–	–	–	**22**
Community Care Information Management	–	–	–	–	–	–	–	4	15	**19**
Subtotal	**205**	**105**	**130**	**162**	**179**	**175**	**172**	**179**	**176**	**1,483**
Total Ministry-Funded	**998**	**403**	**437**	**444**	**510**	**484**	**461**	**521**	**475**	**4,733**

	Annual Spending ($ million)										14-Year Total
	2002/03-2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16		
LHIN-Funded											
Hospitals[2]	761	302	318	315	321	333	338	349	363		**3,400**
Community Mental Health and Addictions	15	7	6	8	9	10	11	14	12		**92**
Community Care Access Centres[2]	–	–	12	11	12	13	13	13	14		**88**
Children's Treatment Centres	9	4	4	4	5	5	5	5	5		**46**
Community Support Services	2	3	3	4	5	5	5	6	6		**39**
Long-Term Care Homes[3]	–	–	–	–	–	–	–	–	–		**–**
Community Health Centres[3]	–	–	–	–	–	–	–	–	–		**–**
Total LHIN-Funded	**787**	**316**	**343**	**342**	**352**	**366**	**372**	**387**	**400**		3,665
Total Ministry- and LHIN-Funded	**1,785**	**719**	**780**	**786**	**862**	**850**	**833**	**908**	**875**		8,398

1. Agency costs include corporate and other project costs not reported in "core projects" above.
2. Based on information obtained directly from the entity (or a sample of entities) rather than as recorded by the Ministry.
3. Ministry's record of these organizations' information technology expenditures is nil.

systems would exist even without the EHR initiative, many of these local systems contain health information needed for the provincial EHR systems. Without these local systems in the broader health sector and the health information they contain, eHealth Ontario cannot achieve the goal of an EHR initiative.

The 2016 eHealth Ontario mandate review noted that much of the funding provided by the LHINs to hospitals and other health-care organizations supports ongoing front-line operations, such as hospital information systems, home care information systems, and other community programs. These systems contain patient health information important to the EHR initiative.

While the Ministry's financial information system shows that LHIN-funded health-care organizations have spent over $7 billion on information technology in the 14-year period between 2002/03 and 2015/16, the Ministry could not determine how much of that $7 billion was spent on information systems that contain patient information relevant to the EHR, and how much was spent on other systems such as human resources and payroll systems for health-care professionals who work in these organizations.

Of the $7 billion, we estimated the EHR-related spending in the 14-year period using information we obtained directly from a sample of hospitals and the Ontario Association of Community Care Access Centres. This amount is about $4 billion.

Overall Public Spending to Enable EHR in Ontario

In total, the government had spent $8 billion to enable EHR in Ontario over the last 14 years ending in March 31, 2016, according to financial information maintained by the Ministry, eHealth Ontario and our own estimate.

Canada Health Infoway, an organization composed of Deputy Ministers of Health from across Canada, estimated that, in 2015, the benefit to

Ontario from selected digital health projects was $900 million.

We expect total Ontario government spending for the EHR initiative will exceed $8 billion from all sources, as work is still under way by most health-care organizations and eHealth Ontario still has more work to do to complete its outstanding commitments.

4.2.2 Ministry Does Not Have an Overall Cost Estimate for the Overall EHR Initiative

The government-prepared 2008 eHealth strategy did not contain estimated costs of EHR implementation, though the 2009 Ontario Budget did include a commitment of about $2 billion for the implementation of an EHR over the next three years. This budget was to cover costs of all EHR projects such as physician adoption of electronic medical records, the Electronic Child Health Network, and Panorama—the province's immunization system—in addition to the seven projects that the government later identified as "core" including the labs system, diagnostic imaging system and the drug system.

Similarly, eHealth Ontario's 2009-2012 eHealth strategy noted an estimated cost of $2.133 billion over the three-year period to complete its strategy.

Despite the publicly announced $2 billion commitment made by both the Ontario government through its budget and eHealth Ontario through its strategy document, Treasury Board still had to officially approve the spending through a formal budgetary process. In 2010, Treasury Board approved a budget of $1.06 billion to implement seven core EHR projects, of the total 12 projects identified in the June 2010 Ministry's mandate letter. The Ministry noted that this approved budget was to be applied against all EHR expenditures incurred prior to 2010 as well.

As explained in **Section 4.2.1**, to enable a fully functional EHR, public spending is also needed on the remaining five projects noted in the 2010 mandate letter, and other health information systems that operate out of Ministry-funded and LHIN-funded health-care organizations and agencies in the broader health sector. These organizations receive annual funding allocation for operations from the government's formal budgetary process.

eHealth Ontario indicated in a June 2016 presentation to its board that it anticipates incurring another $48 million, which is within the $1.06 billion budget, to complete all of its outstanding EHR commitments to build core projects by March 2017 to enable physicians and other health-care professionals to access complete patient health information in their care of patients. eHealth Ontario also determined that it will work on expanding contribution and use, and sustainment of the core projects it is responsible for beyond March 2017. However, there is no additional cost estimate for the remainder of the work of all other health-care organizations participating in the EHR initiative, such as the estimated $2 billion needed to upgrade information systems in local hospitals, as noted in an August 2016 report of an advisory panel on hospital information systems formed by the eHealth Investment and Sustainment Board.

Good planning practice and fiscal prudence would require the Ministry to consider spending by these individual organizations when determining the entire estimated costs for implementing EHRs for all Ontarians. Neither the Ministry nor eHealth Ontario was aware of any other overall government budget specific to the EHR initiative other than the $1.06 billion approved for the core project work that considered the costs related to the implementation of EHR by all organizations funded by either the Ministry or the LHINs. Without such information, the government cannot easily monitor overall spending on the EHR initiative.

A new EHR budget would also need to reflect changes made to the EHR initiative since the original 2010 Treasury Board-approved project budgets. For instance, since the Ministry took over the responsibility of the drug information system from eHealth Ontario, it had only estimated a budget of $20 million for an initial phase of the project, but not for the remainder of the work required

to March 2020 to complete the project. The Ministry indicated that it would establish separate budgets for the different parts of the project for the remainder of the work. The project had a budget of over $200 million when it was the responsibility of eHealth Ontario. As well, the Diabetes Registry had a budget of $98 million but the project was cancelled in 2012 and no registry was built. We discuss these projects further in **Section 4.2.4**.

4.2.3 eHealth Ontario Incurred Other Project Costs Besides Those Reported Against Approved Project Budgets

As shown in **Figure 5**, eHealth Ontario and its predecessor agency have reported a total of about $730 million of core project spending over a 14-year period against the $1.06 billion approved budget for the seven core EHR projects. Spending that is directly attributed to the projects is required to be reported annually by the Ministry to Treasury Board.

In addition to the approximately $730 million in core project costs, we found that eHealth Ontario and its predecessor agency also incurred roughly $300 million more in operational support costs over the same period, categorized as project costs in their internal financial systems. These include eHealth Ontario's salaries for senior management and staff, and administrative and overhead costs related to the projects. eHealth Ontario stated that these other costs do not fall within the scope of the approved budget of the core projects and that these costs are reported separately to the Ministry through eHealth Ontario's annual budget.

Figure 5: Budgeted and Actual Costs to Implement Core Electronic Health Record Projects in Ontario, 2002/03–2015/16

Sources of data: eHealth Ontario and the Ministry of Health and Long-Term Care

					Over/(Under) Budget as of March 31, 2016	
Projects	Approved Budget (A)	Actual Project Cost as Reported by eHealth Ontario (B)	Other Project Costs Incurred (C)	Total Costs Incurred (D)=(B)+(C)	Against Project Cost Reported (B)–(A)	Against Total Costs Incurred[1] (D)–(A)
	($ million)					
Integration Services	366	328	<1	328	(38)	(38)
Drug Information System (by eHealth Ontario)[2]	206	36	15	51	(170)	(155)
Client, Provider, and User Consent Registries	145	105	18	123	(40)	(22)
Ontario Laboratories Information System	109	81	135	216	(28)	107
Diagnostic Imaging	108	90	133	223	(17)	115
Diabetes Registry – cancelled	98	71	<1	71	(27)	(27)
Client, Provider, and User Portals	25	16	3	19	(8)	(5)
Total	**1,057**	**727**	**305**	**1,031**	**(330)**	**(26)**

1. Numbers may not add due to rounding.
2. The Ministry of Health and Long-Term Care took over this project from eHealth Ontario in May 2015, and has incurred another $5 million against a separate budget of $20 million as of March 31, 2016.

When only core project costs (excluding other costs) are considered, the 14-year spending on all seven core projects was still within their individual project budgets. But when the total project costs are included, spending for both the Ontario Laboratories Information System and the Diagnostic Imaging System was over budget by about $100 million, while spending in the other core projects was still under budget. Nevertheless, when compared to the approved budget of $1.06 billion, all project costs spent as of March 31, 2016 were still within budget. Neither eHealth Ontario nor the Ministry has publicly reported actual spending of the EHR projects against their budget.

RECOMMENDATION 2

To ensure that the full costs of implementing the Electronic Health Records Initiative are transparent, appropriate and reasonable, the Ministry of Health and Long-Term Care should:

- prepare an updated budget of the costs to complete the overall initiative, including estimated costs of all EHR projects to be developed by taxpayer-funded health-care organizations—not just eHealth Ontario—along with its revised EHR strategy; and
- publicly report, at least annually, on all costs incurred to date and the status of these costs compared to the updated budget and plans.

MINISTRY RESPONSE

The Ministry and eHealth Ontario welcome this recommendation. As noted, the Ministry will be seeking approval of the Digital Health Strategy (Strategy). The Strategy will take into consideration the necessary resources required by the overall initiative and appropriate reporting mechanisms.

Within the governance structure, as defined under the Strategy, projects (along with their budgets) will be formally approved. eHealth Ontario, as the principal delivery partner of the EHR core projects, will publicly report (using the existing mechanism of the annual report) on all costs incurred and the status of their costs compared to the updated approved budget and plans as applicable.

The Ministry supports the principle of public reporting and will explore opportunities for further public reporting, at least annually, on all costs incurred to date, and the status of these costs, compared to the updated budgets and plans.

4.2.4 Over $100 Million Spent on Two Original Projects Since Cancelled or Transferred

Two of the 12 EHR projects identified in the Ministry's 2010 mandate letter to eHealth Ontario—the Diabetes Registry and the Drug Information System—were not implemented at the time of our audit in May 2016. Spending on these two projects reached about $120 million before the responsibility of the Drug Information System was transferred from eHealth Ontario to the Ministry, and the Diabetes Registry was terminated before it was completed.

Diabetes Registry

eHealth Ontario had identified the Diabetes Registry as one of three clinical priorities to be addressed between 2009 and 2012 in its strategy. Intended to contain information about every Ontarian with diabetes, the Registry was to have given physicians and the Ministry real-time patient data and enabled comprehensive online patient monitoring.

The Registry was initially scheduled for delivery in April 2009, but this deadline was moved up several times. Our 2012 audit of the Diabetes Management Strategy found that several factors contributed to the delay, including:

- the procurement of a vendor to develop and implement the Registry was delayed, as the contract with the successful vendor was

signed in August 2010, two years after funding was approved in 2008;
- the vendor that won the contract may have underestimated both the time required for the project and the project's complexity when bidding for the contract; and
- the project-design blueprint developed by the vendor appeared to contain many errors and omissions, which led to rejections and reworking of the design.

eHealth Ontario eventually cancelled the project in September 2012. Total spending on the Registry by the Ministry and eHealth Ontario was about $71 million between 2008/09 and 2015/16, including $26.9 million awarded to the vendor through an arbitration process.

As mentioned in our 2012 audit of the Diabetes Management Strategy, as well as this current audit, eHealth Ontario no longer has plans to conduct further work in this area and no longer considers the Registry an essential EHR component, explaining that many physicians are now using Electronic Medical Records software and can access the information necessary in the EHR to manage diabetes.

Drug Information System

Cabinet approved the Drug Information System in the 2008 eHealth strategy, requiring eHealth Ontario to develop a system that would allow for electronic drug prescribing and dispensing, and contain patients' comprehensive medication profiles. The strategy also required eHealth Ontario to procure a vendor to develop a repository to store data to enable identification of events such as adverse drug reactions. The system was supposed to be completed by March 2016.

In May 2013, after eHealth Ontario failed to procure a vendor to develop the repository within the government's approved costs, eHealth Ontario halted the project work. In May 2015, the Ministry received formal central agency approval to take over the responsibility for the project, with technical support to be provided by eHealth Ontario. By March 2015, eHealth Ontario and the Ministry had already spent about $50 million on the project, for purposes such as preparing procurement documents and defining foundational planning and system requirements.

4.3 Available Electronic Health Record Systems Not Fully Functional or Contained Incomplete Information

4.3.1 EHR Initiative Not Completed by 2015 as Planned

By the targeted deadline of March 2015, the majority of the seven core EHR systems had been developed, and information in these systems was being shared among authorized health-care professionals. However, a fully functional EHR was still not available.

A year later, in March 2016, eHealth Ontario estimated that it had completed 77% of the original core assignments—81% after taking into account that some projects had changed, were cancelled or reassigned, as shown in **Figure 6**.

Most of the seven core EHR systems were available at the time of our audit in spring 2016; however, some of the core EHR projects were either not fully functional, or did not contain all the required patient health data.

In **Sections 4.3.2** to **4.3.4**, we discuss the progress and functionalities of five EHR projects—the Ontario Laboratories Information System (Labs System), Diagnostic Imaging, Integration Services, the Drug Information System, and connection of physician offices' electronic medical records to these databases.

4.3.2 Systems Implementation Delayed

Both the Diagnostic Imaging project and the Integration Services project were implemented in phases. Targeted completion dates for each of these phases were established but not met. Similarly,

Figure 6: Percentage of Completion of Core Electronic Health Record Projects, March 2016
Source of data: eHealth Ontario

	Based on Requirements in Original 2010 Government Commitment, Including the Diabetes Registry and Medication Management System		Based on Amended Project Scope Since 2010, Including Cancellation of Diabetes Registry, Transfer of Medication Management System to Ministry, and Evolved Technology Over Time	
Projects	**# of Deliverables Expected**	**% of Completion According to eHealth Ontario**	**# of Deliverables Expected**	**% of Completion According to eHealth Ontario**
Ontario Laboratories Information System	24	92	24	92
Diagnostic Imaging	27	82	19	96
Client, Provider, and User Consent Registries	101	79	96	81
Integration Services	123	72	115	74
Client, Provider and User Portals	28	68	21	97
Total	**303**	**77**	**275**	**81**

Note: eHealth Ontario cancelled the Diabetes Registry in September 2012. The Ministry of Health and Long-Term Care took over the Medication Management System from eHealth Ontario in May 2015.

the connection of physician offices' stand-alone systems to the provincial databases of lab tests and diagnostic images was not completed by the target date of March 2015. We discuss these areas in the following subsections.

Diagnostic Imaging

In 2007, the formation of four regional Diagnostic Imaging repositories to cover the entire province was approved, with a budget of $96 million and a completion date of March 2010.

In 2010, government approval was given to extend the completion date by five years to March 2015, and to expand the project scope to, among other things, form a provincial repository to enable sharing of diagnostic reports and images across the four regions of the province. The project budget also increased to $108 million.

To help organize the integration work, eHealth Ontario divided the project into four separate phases, and established different target completion dates for each, with completion of phase four to be completed by June 2015.

At the time of our audit, all phases were delayed:

- The first phase of the project was the uploading of all diagnostic reports into a central repository so that health-care professionals could share information across regional boundaries. This phase was completed in May 2015, 14 months late. However, health-care professionals in one region could not view reports originating from other regions at that time. As of September 2016, all eligible health-care professionals could access all diagnostic reports in the central repository.
- The second phase included the uploading of diagnostic image manifests, which provide a set of references back to the images at source, and the creation of a viewer to allow health-care professionals anywhere in the province to view the images. This phase was not completed by March 2015 as anticipated. At the completion of our audit, the images were uploaded, but health-care professionals in one region could not view images

originating from other regions. As a result, for example, a health-care professional in Toronto could not access x-rays taken in Ottawa. The patient would have to obtain a CD of the images to provide to their doctor for review. eHealth Ontario expects sharing of diagnostic images across the regions to be available by March 2017, two years past the anticipated March 2015 completion date.

- eHealth Ontario indicated to us that phases three and four of the project, which involve connections to the Electronic Medical Records in physicians' offices and to systems that enable viewing of images, would be available following the completion of phase two.

Integration Services

The Integrated Services project, later renamed Connecting Ontario, was launched in 2008. Its goal was to use a centralized approach to integrate (or "connect") large numbers of stand-alone information systems in various health-care organizations, such as hospitals and community health agencies across Ontario. In 2008, the project was given a budget of $221 million and was to be completed by March 2014.

In December 2010, the government approved a revised approach that included the formation of three regional centres or "hubs," each led by a hospital, as shown in **Figure 7**. The budget was also increased 66% to $366 million with a revised target completion date of March 2015.

At the time of our audit, integrated viewers at only two of the three regional hubs were in use, allowing the health-care professionals in these regions to easily access a variety of health information about their patients, including x-rays and blood test results. Health-care organizations and professionals in the remaining region covering Northern and Eastern Ontario could not access all types of patient information through a single EHR viewer, but had to use different viewers to access different patient information within the region and across the province.

Connection of Physician Electronic Patient Records with Provincial Data

According to the 2014 National Physician Survey conducted jointly by the College of Family Physicians of Canada, Canadian Medical Association and the Royal College of Physicians and Surgeons, about 83% of physicians in Ontario used Electronic Medical Record systems (either fully or partially) for patients in their care. Many physicians, such as family doctors, use these systems in their practice to record details of the patient visits.

Despite this significant use of Electronic Medical Record systems in individual physician offices, many physicians were still not able to connect their systems to the provincial EHR systems containing lab tests data and diagnostic imaging, or to the various repositories and registries even though the goal was to do so by March 2015. As a study commissioned by eHealth Ontario in August 2015 highlighted, better integration of physicians' electronic medical records and provincial assets would result in more comprehensive patient records.

At the time of our audit in spring 2016, about three-quarters of the total physicians funded to use certified Electronic Medical Record systems were indeed accessing the Labs System. (We discuss the Electronic Medical Record systems in more detail in **Section 4.4.2**) However, no physicians' local systems were linked to the regional Diagnostic Imaging databases. As a result, physicians could not easily access x-rays, MRIs and lab data from their local systems, which might contribute to delays in diagnosing and treating patients, thus affecting their timely health care.

4.3.3 Systems Had Only Partial Functionality

Although the EHR projects were in operation at the time of our audit, we noted that the Labs System,

Figure 7: Leads, Delivery Partners, Local Health Integration Networks Served, and Health-Care Organizations and Professionals of the Three Connecting Hubs of eHealth Ontario

Source of data: eHealth Ontario

Connecting Hub	Lead	Delivery Partners	Local Health Integration Networks (LHINs) Served	Health-Care Organizations and Professionals Practising as of March 2016
Connecting South West Ontario (cSWO)	London Health Sciences Centre	• TransForm Shared Services Organization • South West Community Care Access Centre • Centre for Family Medicine Hamilton Health Sciences Corporation	**Four LHINs** • Erie St. Clair • South West • Waterloo Wellington • Hamilton Niagara Haldimand Brant	3,500 health-care organizations and professionals as follows: 69 hospitals, 4 Community Care Access Centres, 194 community support services agencies, 19 community health centres, 103 community mental health and addiction service agencies, 234 long-term care homes, 53 Family Health Teams, 2,806 primary-care physicians, and 18 Public Health Units
Connecting Greater Toronto Area (cGTA)	• Sunnybrook Health (April 2016–Present) • University Health Network (Nov 2009–March 2016)	• Sunnybrook Health (April 2016–Present) • University Health Network (Nov 2009–March 2016)	**Six LHINs** • North Simcoe Muskoka • Central • Toronto Central • Mississauga Halton • Central East • Central West	688 health-care organizations as follows: 43 hospitals, 6 Community Care Access Centres, 237 community support services agencies, 26 community health centres, 176 mental health and addiction service agencies, and 200 long-term care homes*
Connecting Northern and Eastern Ontario (cNEO)	The Ottawa Hospital	• Kingston General Hospital • The Ottawa Hospital • Health Sciences North • Northwest Health Alliance	**Four LHINs** • South East • Champlain • North East • North West	680 health-care organizations as follows: 65 hospitals, 4 Community Care Access Centres, 237 community support services agencies, 28 community health centres, 196 mental health and addiction service agencies, and 150 long-term care homes*

* Unlike South West Ontario, the current and short-term focus in Greater Toronto Area and Northern and Eastern Ontario is on acute care and certain community care settings. Therefore, the following are not included in these regions' scope: family health teams, primary care, and public-health units. The focuses of the three regions differ because the South West Ontario Connecting Hub is at a more mature stage of operation than the other Connecting Hubs.

Integration Services and the drug system were not fully functional, meaning health-care professionals could not efficiently obtain some clinical data of their patients.

Labs System

The Labs System acts as a centralized database, collecting test results and other lab data from hospital, community and public-health labs. The System was designed to provide five functionalities: order entry, order retrieval, order referrals to other labs (when the initial lab cannot do the test), results submission, and results retrieval. The System was expected to be fully operational by March 2015.

At the time of our audit, the Labs System was in use, but with only two of the five planned functionalities—results submission and results retrieval. The remaining three were unavailable because of cited legal and privacy concerns, and technical issues. As a result, health-care professionals could not use the system to electronically order lab tests for patients, retrieve lab orders, or refer lab tests to other sites.

The Labs System is also supposed to allow authorized researchers working on health-care planning and policy-making to access data that is free of any patient-identifying information. This data was to be available for use by March 2013. However, we found that there was no repository free of any patient-identifying information available at the time of our audit. Given that this repository is not yet ready, eHealth Ontario has entered into data-sharing agreements with agencies including Cancer Care Ontario and Public Health Ontario. The agreements require these agencies to remove all patient-identifying information before use.

Integration Services

The goal of the Integration Services project was to link the three regional hubs to a central provincial database to enable province-wide information-sharing and access to data repositories and applications on lab, drug and diagnostic imaging information across the different health-care settings by March 2015.

At the time of our current audit more than a year later (and two years after the initial March 2014 target date discussed in **Section 4.3.3**), provincial integration of the three regional hubs was still not complete, affecting emergency room physicians and other health-care professionals' ability to view clinical data of a patient who may have obtained health services from another region.

Drug Information System

According to a jurisdictional review completed by eHealth Ontario, physicians in Quebec, Saskatchewan, England, Scotland, Australia and the United States can send prescriptions electronically to pharmacies. Except for two pilot sites in Sault Ste. Marie and Georgian Bay, most physicians in Ontario cannot yet do this. In July 2016, the Ministry entered into an agreement with Canada Health Infoway for potential early adoption of the ePrescribing service that is expected to be complete by March 2018.

RECOMMENDATION 3

To ensure Electronic Health Record (EHR) projects are completed on time and comprise the anticipated functionalities, eHealth Ontario should:

- make clinical data available without patient identifying information in the Ontario Laboratories Information System;
- set timelines for completing all phases and functionalities of all EHR projects; and
- monitor that progress is made according to established timelines.

RESPONSE FROM eHEALTH ONTARIO

eHealth Ontario accepts this recommendation and will continue to work with the Ministry, as the Health Information Custodian, and the Information and Privacy Commissioner of Ontario, on strategies to allow secure sharing of

non-identifying patient clinical data for secondary use, such as for health promotion, prevention and research purposes.

Timelines were set for the foundational core elements of the EHR and, though there were delays, all the foundational elements of the core EHR projects under eHealth Ontario's responsibility are tracking for completion by March 2017.

The Ministry is developing its Digital Health Strategy. Once it is approved, timelines for completing all phases and functionality of all EHR projects will be set.

eHealth Ontario will monitor progress of its EHR core projects, and will report this information to its Board.

4.3.4 Systems Contain Incomplete Patient Health Information

Centralized EHR data repositories for four projects did not include all patient health information. As a result, even when health-care professionals access these databases to obtain clinical information such as lab tests, diagnostic images and reports, hospital discharge summaries, and prescription information, they may not have a complete picture of the patient's health history. Patients in turn would therefore be less likely to receive the timeliest health care possible.

Labs System

The Ontario Laboratories Information System (Labs System) is a centralized repository that collects lab data from hospitals, community labs and public health labs to enable the sharing of lab data across the province. In March 2016, eHealth Ontario reported that the Labs System contained 197 million or 86% of the lab tests in Ontario. However, the agency measured this percentage of completion against a baseline of 229 million tests conducted that was established in 2010, instead of a higher number of tests conducted in 2016.

eHealth Ontario could have measured the percentage of completion against the current number of independent lab tests that is already collected by the Ministry—258 million lab tests conducted as of March 2016. Even though this number might include other tests that would not be in the Labs System, it can still be used as a proxy of the total lab tests conducted in Ontario for measurement against the completeness of information contained in the Labs System.

As of March 2016, the Labs System did not contain the following:

- About a quarter of the province's active labs, consisting of 30 hospital labs and two community labs, did not contribute a total of about 33 million test results to the Labs System. Although some of these labs indicated that they needed to upgrade their local systems before they could contribute to the Labs System, eHealth Ontario does not have the power to compel hospitals—or anybody else—to contribute data. Thus these lab test results are not available for viewing by health-care professionals in the care of their patients.
- Tests performed in a physician's office. In 2015/16, about 10 million tests were done in physicians' offices rather than in labs, including pregnancy tests and tests required for private insurance. eHealth Ontario stated that these tests were not intended to be included in the Labs System because they were not performed in accredited labs by licensed lab personnel. However, in November 2015, an expert panel that reviewed lab services in Ontario recommended that the Ministry provide quality oversight on physician in-office tests, and that these tests be connected to the Labs System so that a patient's complete health profile is available to be accessed by health-care professionals.
- Community lab tests not covered by the provincial health insurance plan (OHIP). In 2015/16, about 1.3 million of these tests were conducted, including allergy and prostate

cancer screening, and tests paid for by private or federal government health plans or by patients themselves.

In addition, through contractual agreements with individual labs, eHealth Ontario may specify the types of tests, due to sensitivity or other factors, that the labs can exclude from the Labs System. But eHealth Ontario did not have a listing of the types of excluded lab tests by lab, and had not verified that labs had in fact excluded the right types and numbers of tests as set out in these agreements.

RECOMMENDATION 4

To ensure complete and accurate information is available in the Ontario Laboratories Information System (Labs System) for health-care professionals to provide better care for patients, eHealth Ontario should:

- regularly work with the Ministry of Health and Long-Term Care to help identify any lab information that should be uploaded to the Labs System, and require health-care organizations and health-care professionals to upload all lab information; and
- confirm that individual laboratories do not exclude more tests than specified in their contractual agreements with eHealth Ontario.

RESPONSE FROM eHEALTH ONTARIO

The Ministry and eHealth Ontario accept this recommendation and will continue to work together to identify lab information that should be uploaded to the Ontario Laboratories Information System (Labs System) with due regard to cost, benefit and alignment with the Digital Health Strategy when it is approved.

eHealth Ontario accepts this recommendation and will establish a re-conformance process with the labs currently contributing to the Labs System to ensure that only those results that were agreed to contractually will be excluded from the repository. Following the re-conformance testing, eHealth Ontario will regularly report and monitor to ensure ongoing compliance.

Diagnostic Imaging

Four diagnostic imaging repositories across Ontario store images and reports for exams such as x-rays, MRIs, CT scans and mammograms. These exams are conducted in both hospitals and privately owned, for-profit clinics (referred to as independent health facilities). Independent health facilities provide diagnostic services at no charge to patients covered by OHIP.

As of March 2016, the four regional repositories did not contain all images from independent health facilities and specialty images from hospitals:

- The regional repositories contained only 40% of images available to be uploaded from independent health facilities in Ontario. At the time of our audit, the repositories contained 3.6 million of these images, so eHealth Ontario had in fact surpassed the target of 3.4 million images, but data from 2013/14 (the most recent year of data available at the time of our audit) indicates that almost nine million diagnostic images were taken in independent health facilities across Ontario. The images in the repositories originated from 29% of all independent health facilities in Ontario, while the remaining 5.4 million images originated from facilities that eHealth Ontario identified in 2011 as not able to provide diagnostic images because they did not use digital equipment. eHealth Ontario has not followed up to check if any of these facilities have since converted to digital equipment. As well, at the time of our audit, eHealth Ontario had no plans to identify how many new clinics have opened since 2011 or to include their images and reports.
- All images and reports for specialty areas such as cardiology and ophthalmology are available from hospitals but are not included

in repositories as eHealth Ontario noted that the government did not specify them to be included. Health-care professionals we spoke to said that having access to these images and reports would be of great benefit to patient care.

RECOMMENDATION 5

To ensure complete and accurate information is available in the Diagnostic Imaging central repository for health-care professionals to provide better care for patients, eHealth Ontario, in conjunction with the Ministry of Health and Long-Term Care, should:

- require all currently operating independent health facilities to upload diagnostic images and reports to the repository; and
- require diagnostic images and reports conducted for specialty areas such as cardiology and ophthalmology to be uploaded to the repository, and identify the need to include any other specialty reports.

RESPONSE FROM eHEALTH ONTARIO AND THE MINISTRY

The Ministry agrees that complete and accurate information should be available in the Diagnostic Imaging central repository. The Ministry will work with eHealth Ontario to assess the costs and value associated with integrating new independent health facilities that have opened since 2011, and to include those that have digitized since then. It may be determined based on value to Ontarians that some may not merit inclusion. The Ministry and eHealth Ontario will ensure that the investment to integrate new clinics and recently digitized independent facilities is appropriately assessed in the context of the Ministry's new Digital Health Strategy (Strategy) once approved. The Ministry will work with eHealth Ontario to develop options and recommendations to inform future government decisions through the Digital Health Board.

The Ministry and eHealth Ontario will work with clinician experts and service partners to conduct a review to identify which specialty reports should be included. As part of this review, they will determine the cost estimate and technical requirements of adding this information to the diagnostic imaging repository. The investment to do so will be appropriately assessed in the context of the Ministry's new Strategy. The Ministry will work with eHealth Ontario to develop options and recommendations to inform future government decisions through the Digital Health Board.

Integration Services

Each of the three regional connectivity hubs, under a contractual agreement with eHealth Ontario, is required to implement a regional EHR viewer and ensure it is adopted by targeted health-care professionals. The viewer provides health-care professionals with web-based access to patient health information such as hospital discharge summaries and patient notes that originated within the same region to assist them in their care of patients.

In order to view information, hospitals and other health-care organizations within each region were given a target date of March 2014 to load specific types of patient health information into a central repository, including hospital discharge summaries, reports on emergency visits, community agency reports and patient consent notices.

However, as shown in **Figure 8a**, as of May 2016 (more than two years after the deadline), only about 60% of the targeted health-care organizations in the Greater Toronto Area hub had loaded their patient health information, compared to only about 30% and 15% of the targeted health-care organizations in the other two hubs. As a result, health-care professionals cannot benefit from central access to much of the patient health information created in their own regions, or in

other regions. Because of the low uploading rate, health-care professionals in the Northern and Eastern Ontario region had not yet begun viewing the clinical data in the provincial repository, as shown in **Figure 8b**.

eHealth Ontario expects the targeted number of sites within the three regional hubs to add all required patient information to the central database by March 2017. For the remaining sites, eHealth Ontario had not yet established a timeline for adding patient information.

RECOMMENDATION 6

To ensure that health-care professionals can electronically access all necessary information to obtain a complete medical profile of their patients and deliver timely and quality patient care, eHealth Ontario should monitor the regional hospital administrators for connecting systems to ensure that all health-care organizations in their regions contribute required data to the central database.

RESPONSE FROM eHEALTH ONTARIO

eHealth Ontario accepts this recommendation and will work with the Ministry to identify information that should be made securely accessible to health-care professionals with due regard to cost, benefit and alignment with the Digital Health Strategy when it is approved. The Ministry will work with eHealth Ontario to develop options and recommendations to inform future

Figure 8a: Status of Health-Care Organizations Uploading Clinical Data to Central Repository, May 2016
Sources of data: eHealth Ontario

	Target Completion Date		Percentage of Health-Care Organizations Uploading Clinical Data[1]	
	Original (2010)	**Revised (2016)**	**As at March 2014[2] (%)**	**As at May 2016[3] (%)**
Greater Toronto Area	March 2014	March 2017	29	58
South West Ontario	March 2014	March 2017	0	31
Northern and Eastern Ontario	March 2014	March 2017	0	15

1. Examples of clinical data include hospital discharge summaries and notes on patient encounter or visit.
2. Measured against original 2010 targets.
3. Measured against revised 2016 targets.

Figure 8b: Status of Clinicians Registered to View Clinical Data in Central Repository, May 2016
Sources of data: eHealth Ontario

	Target Completion Date		Percentage of Clinicians Registered to View Clinical Data[1]	
	Original (2010)	**Revised (2016)**	**As at March 2014[2] (%)**	**As at May 2016[3] (%)**
Greater Toronto Area	March 2013	March 2017	0	70
South West Ontario	March 2014	March 2017	0	104[4]
Northern and Eastern Ontario	March 2014	March 2017	0	0[5]

1. Examples of clinical data include hospital discharge summaries and notes on patient encounter or visit.
2. Measured against original 2010 targets.
3. Measured against revised 2016 targets.
4. This region registered more clinicians to view clinical data than the target.
5. No viewing occurred as most health-care organizations in this region had not yet uploaded data to the central repository.

government decisions through the Digital Health Board.

eHealth Ontario has taken steps to establish a rigorous process to monitor and track which health-care organizations contribute data. eHealth Ontario currently requires its regional service delivery partners to report monthly on the number of sites contributing and accessing data. Following the implementation of the revised agreement process, eHealth Ontario's oversight of delivery partners has become more robust to ensure regions contribute additional data to provincial assets like the clinical document repository, which as of October 2016 contained 54 million documents, an 87% increase since a year earlier, and that any barriers to contribution are fully understood with action plans to remediate them. As well, all three regional hubs are currently contributing to the electronic health record and viewing clinical data in support of patient care.

Drug Information System

At the time of our audit, many health-care professionals still did not, or could not, access centralized drug information, while others could access only some medication information of their patients. Many patients' drug information was not even available in a central database.

The Ministry, which took over the responsibility of the drug information system from eHealth Ontario in May 2015, was still in the process of developing a central repository of all drug information for Ontarians when we completed our audit in late spring 2016.

Until this repository is built, health-care professionals can access information in the province's drug-claims payment system through a web-based viewer that was developed in 2005. However, even though the viewer is available, health-care professionals still cannot access complete drug information for their patients because:

- The drug-claims payment system contains records for only about 40% of patients in Ontario including those whose drug costs are covered under publicly-funded drug programs—including people 65 or older, those on social assistance, recipients of home care services enrolled in the home care program, and those who have been prescribed very-high-cost drugs or narcotic drugs. Patients whose drugs are paid for by private insurance or federal public programs (such as veterans' benefits) or those who pay for their drugs themselves are not included.
- Prior to a June 2016 legislative amendment, only certain health-care professionals could legally view dispensed monitored narcotics.
- No physicians, except those connected through the South West Ontario hub, could view data on drugs administered during hospital stays. Instead, they have to access this information through individual local hospital systems.

We contacted other Canadian jurisdictions and found that British Columbia, Alberta and Prince Edward Island each had a drug information system that included information on all drugs being taken by a patient, including narcotics, to support decision-making and to help identify potential adverse drug interactions.

Since limited drug information was available for viewing, during the period from April 2015 to January 2016 only 30% of approximately 12,500 health-care professionals authorized to access the viewer actually used it. While most hospital health-care professionals could access the drug information viewer, many others could not. Health-care professionals in only 20 of about 100 community health centres in Ontario had access to the drug information viewer, and the Ministry has no plans to connect the remaining 80 health centres. As well, pharmacists who dispense medication in the community could not access the viewer. Not having access to a patient's complete medication profile through the drug viewer limits a pharmacist's

ability to review and assess patients' medications to avoid potential adverse drug interactions and for drug management.

Subsequent to the completion of our audit fieldwork, the Ministry indicated that a central drug repository has been developed and is in use by authorized early adopters in southwest Ontario, with plans under way to expand access to other health-care providers starting in 2017. At that time, the Ministry will retire the web-based drug information viewer. The Ministry plans to continue to support the viewer until a fully operational central drug repository is made available across the province.

RECOMMENDATION 7

To ensure health-care professionals can access complete drug information about their patients so that potential adverse drug interactions, drug poisoning and other drug-related problems can be reduced, the Ministry of Health and Long-Term Care should:

- include all medication information for all Ontarians in the central drug repository; and
- set targets to connect all health-care professionals across the province to the central drug repository.

MINISTRY RESPONSE

The Ministry agrees that it is important to securely incorporate comprehensive drug information to support the best possible medication history for patients in a repository that is accessible to all health-care providers. As such, the Ministry has developed an overarching Comprehensive Drug Profile Strategy (Drug Strategy) that has been approved by government. The Drug Strategy is designed to leverage existing provincial publicly funded assets, to maximize the Ministry's current investments and successes in Ontario, and to deliver clinical value to patients and health-care providers. The Ministry will adopt an incremental approach where benefits will start to accrue in the shorter term—each discrete stage of the Drug Strategy is to be cost estimated and approved by government as work progresses. The initial stage of the Drug Strategy, a Digital Health Drug Repository, has been developed and is in use by authorized early adopters in southwest Ontario with plans under way to expand access to other health-care providers starting in 2017. The Ministry will ensure eHealth Ontario and its regional partners establish appropriate targets to connect all health-care providers across the province to this repository as it becomes fully operational.

Throughout the subsequent stages of the Drug Strategy, the Ministry will ensure alignment with the new Digital Health Strategy. The non-Ministry funded drug information is not part of the government's assets. As such, work with the health-care providers, private insurers, policy-makers and the Information and Privacy Commissioner of Ontario will be required to fully achieve the Drug Strategy. The Ministry will work to develop options and recommendations to inform future government decisions.

4.4 Many Factors Delayed Full Implementation of Electronic Health Records

4.4.1 Health-Care Organizations Don't Have to Participate in EHR Projects

The participation of health-care professionals in the development of EHRs is critical, yet neither the Ministry nor the LHINs, which fund many of the local health-care organizations that provide direct health care, require them to participate in the initiative except in a small number of projects including Panorama. Instead, participation is, for the most part, voluntary.

LHINs enter into funding agreements with health-care organizations in their region, such as hospitals, Community Care Access Centres and community health centres. These funding

agreements require organizations to use technology solutions that are compatible or interoperable with the provincial EHR plan—but they stop short of requiring the organizations to participate in or contribute health information to EHR systems. As a result, funded health-care organizations may choose not to contribute health data to the various data repositories, as discussed in **Section 4.3**.

In the case of the Labs System, the Ministry had originally anticipated making it mandatory for all community and hospital labs to participate in the system, though this was never implemented.

The Ministry and eHealth Ontario believed that health-care professionals would voluntarily participate in the initiative after seeing the benefits demonstrated in various benefits realization studies conducted on various EHR systems and many are actively involved in contributing data to, and participating in, the implementation of these systems across the province.

The Ministry further indicated that, based on an external consultant's 2015 review of major jurisdictions' experiences in implementing EHR, a "top-down approach" mandating participation in EHR projects has worked well only in limited circumstances—in jurisdictions where their organization environment enabled such an approach, but not in most other jurisdictions.

In our view, voluntary participation in the current "patient first" health environment would be a major hindrance to the success of Ontario's EHR initiative, because there is no assurance that clinical information will be complete in the system. Health-care professionals would therefore not have all available information about their patients.

4.4.2 Standardized Requirements Not Defined at Outset of the Initiative

Defining the standard requirements for the EHR systems implemented by health-care organizations at the outset of the EHR initiative would have been a prudent step to enable integration of systems and facilitate the contribution of data from organizations across the province. Diverging to expanded functionalities later on if they turn out to be critically important would be easy, while converging a multitude of systems without initially agreeing on core requirements would be almost impossible. Initial standardization could have made connection of the various systems easier and possibly cheaper.

The 2014 strategic review of the eHealth strategy similarly noted that health-care professionals and organizations in the broader health sector who develop their own EHR solutions generally align with the broader ehealth strategy, but they could create a challenge because some of these systems may not integrate with other systems to support the EHR.

Many health-care organizations and professionals across Ontario—for instance, hospitals and primary care physicians—had already invested in their own electronic systems to manage their patients' health records prior to the province announcing the EHR initiative. These organizations would have chosen the technology solution that best met their staff's and patients' needs without considering whether the system would be compatible with other organizations'.

Even after the launch of the EHR initiative, the LHINs did not mandate that the health-care organizations they fund adopt common technical systems. For example, each hospital could select from 14 different vendors to implement the hospital information system that they believed met their needs.

Similarly, the Ministry did not require all community-based physicians (such as family doctors) to use a standardized Electronic Medical Record software. Individual community-based physicians who want to manage their patients' health information electronically can select the software of their choice. According to OntarioMD, a wholly owned subsidiary of the Ontario Medical Association, an estimated 80% of patient health data is stored in computers in physicians' offices as Electronic Medical Records, which are critical to the EHR initiative.

Between 2009/10 and 2015/16, the Ministry paid OntarioMD about $410 million to provide incentives to community-based physicians to adopt software from any of 17 certified vendors (reduced to 13 at the time of our audit, and further to 10 subsequent to our audit, due to vendor mergers). A vendor is certified if its software meets provincial specifications to enable integration to other EHR systems such as the Labs System and hospital report systems. Each physician who adopted certified Electronic Medical Records software received a one-time payment and monthly subsidies totalling up to $29,800, based on achievement of certain milestones. The government did not require all primary-care physicians to adopt certified vendor software, so physicians using non-certified software could choose to modify their system (if possible) in order to access the various EHR systems and contribute patient data, or else forfeit the ability to access or contribute to EHR systems at all. OntarioMD does not collect information on the number of physicians who chose software from non-certified vendors.

We conducted research to determine whether the original approval of 17 certified vendors is typical in the implementation of physician office patient record systems in other provinces. We found that five other provinces approved anywhere from one to nine certified vendors, fewer than Ontario's original number. The Ministry explained that it wanted physicians to have more choice when selecting certified patient record systems.

Given the large number of physician patient record systems, extraction of similar patient information from the dozen certified systems is difficult, because the various software packages handle the same data in different ways. As well, because not all physicians use certified software systems, accessing centrally stored health information such as lab tests or diagnostic imaging would not be equally easy for all physicians in Ontario. In addition, according to our survey results, some physicians had to transfer their patient files from one certified system to another certified system due to vendor mergers as noted earlier, costing physicians significant time and money and potentially reducing the time available to provide patient care.

eHealth Ontario expects to spend $366 million to integrate the health sectors' diverse systems—the Integration Services project is the most costly component of the EHR initiative.

RECOMMENDATION 8

To ensure participation of all health-care agencies, organizations and providers in the Electronic Health Record initiative, and to confirm interoperability of systems, the Ministry of Health and Long-Term Care should:

- amend service agreements to require participation in, and contribution of, information to projects within the Electronic Health Record initiative; and
- establish interoperability standards where necessary.

MINISTRY RESPONSE

The Ministry and eHealth Ontario agree interoperability of systems is required for the continued success of the Electronic Health Record initiative. The Ministry will carefully mandate use/participation as technology advances and the concerns and complexities of the stakeholder community can be addressed.

The Ministry will seek opportunities to implement compliance requirements for participation in the EHR domain including adopting industry-supported messaging and data standards and remaining current in the technology used with due regard to cost, benefit and alignment with the Digital Health Strategy when it is approved. The Ministry will work to develop options and recommendations to inform future government decisions, through the potential creation of new levers, such as regulations or through modifying core funding models, and where practical, amending service agreements.

4.4.3 Policy and Legislative Issues Not Always Resolved in Timely Way

Policy and legislative issues that may have prevented implementation of some EHR projects were not always addressed ahead of time, thus contributing to delays.

In one case, physicians were unable to electronically order lab tests in the Ontario Laboratories Information System at the time of our audit because the regulation required physicians to physically sign lab-test requisitions. An amendment to the regulation is therefore required to allow physicians to electronically order tests, which would speed up the process and lower the risk of transcription errors.

Similarly, not all physicians and other health-care professionals could access narcotics medication information because the *Narcotics Safety and Awareness Act, 2010* needed to be amended to allow access without the need for a written request if the health-care professional is not the original prescriber and dispenser. Lifting this requirement to access narcotics medication information helps avoid prescribing medications that may adversely impact patients. This issue was addressed through a change, which was proclaimed in June 2016, to this Act.

RECOMMENDATION 9

To ensure that all functions of the Ontario Laboratories Information System can be operational, and for all future work on Electronic Health Record systems to be successfully implemented, the Ministry of Health and Long-Term Care should first identify policy and regulatory implications, and then work to amend them within the project timelines.

MINISTRY RESPONSE

The Ministry accepts this recommendation. The Ministry has provided and will continue to provide any required legislative and policy support as needed for the core EHR projects. Through the Digital Health Strategy, the Ministry will seek opportunities to identify future policy and legislative requirements in support of the digital health initiatives.

4.4.4 Better Oversight of Contracted Service Providers Needed

At the time of our audit, eHealth Ontario had entered into agreements with about 30 health-care organizations with contracted costs totalling about $200 million to deliver various aspects of the province's EHR initiative.

The agreements set out specific requirements such as the responsibilities of the organizations, funding to be provided, the final products to be delivered, and regular reporting of performance data such as number of registered users, active users, connections and response times.

Previous reviews of eHealth Ontario indicated that it lacked appropriate oversight of its contracted service providers. For example, a strategic review of eHealth Ontario and the overall eHealth strategy in 2014 noted that the agency's oversight of its health partners would benefit from more rigour and discipline. The review suggested that the agency institute formal structures to govern decision-making and take remedial action when required, establish disciplined assessment and reporting, and implement metrics to enable progress measurement.

Similarly, eHealth Ontario's own internal audit group that conducted an audit of the agency's oversight of contractual agreements between 2011 and 2014 noted governance and oversight issues in an August 2015 report, including:

- Project deliverables and milestones set out in agreements were not linked to funding paid to health-care partners. Payments were made based on forecasted amounts instead.
- eHealth Ontario paid health-care partners without first reviewing invoices for their appropriateness or confirming that deliverables were achieved.

Further to issues already identified in these reviews, we also noted that eHealth Ontario did not require health-care agencies with which it contracts to report on any outcome-based performance measures. Instead, performance measures in agreements were mostly output-based and related to such indicators as volume of active users, number of registered users, and percentage of lab test volumes contributed. Outcome-based indicators such as measures of user satisfaction, reduced repeat emergency department visits, reduced number of unnecessary repeat tests, and reduced adverse drug interactions, can help eHealth Ontario evaluate whether project objectives were met.

It should be noted that, to improve oversight, eHealth Ontario formed an internal group in February 2016 that is responsible for providing contract management and oversight for all contracted services.

RECOMMENDATION 10

To ensure service-delivery partners comply with contractual requirements, eHealth Ontario should revise agreements to include outcome-based performance measures and related targets for the various Electronic Health Record projects, and collect this information to assess achievement of project objectives.

RESPONSE FROM eHEALTH ONTARIO

eHealth Ontario accepts this recommendation. While the initial implementation projects with delivery partners contain output measures, once the core foundational elements are completed, eHealth Ontario will work with entities (such as Health Quality Ontario) to establish outcome-based indicators—including user satisfaction, reduced repeat emergency department visits, reduced number of unnecessary repeat tests, and reduced adverse drug interactions—to evaluate whether project benefits are being met over time.

4.4.5 Reduced Annual Funding Impacted Ability to Deliver on Project Targets

eHealth Ontario's spending on its own operations and on EHR projects depends on its annual funding from the Ministry. When eHealth Ontario's annual budgets fluctuate, it has to reprioritize work plans to stay within budget, which may affect project completion. For instance, eHealth Ontario's approved funding went from $426 million in 2014/15 to about $300 million in 2016/17. As a result, eHealth Ontario noted in its 2016/17 annual business plan that it had to change a project target relating to the Ontario Laboratories Information System: instead of collecting 90% of the total Ontario lab test volumes into the system, it will target about 85%. It should be noted that the decreased funding was partly due to implementation of fiscal restraints across the government as well as removal of funds related to OntarioMD, which is now the Ministry's responsibility.

4.5 System Usage Below Expectation and Needs to Be Better Measured

The ultimate success of any information technology system is dependent on whether it was delivered on time and on budget, whether it meets the needs of users, and whether users actually use it. It is therefore critical to have health-care professional buy-in on EHR projects because they need to adopt the technology and incorporate it in their daily workflow, to fully realize the systems' benefits.

Determining who accesses the systems and the data contained within them helps eHealth Ontario identify opportunities to increase awareness and support users so that benefits to the health-care system are realized. In turn, patients can receive better quality and timely health care, such as improved diagnosis and disease management, and reduced adverse drug interactions.

4.5.1 Utilization Data Not Reliable or Useful

eHealth Ontario establishes targets of active users for its various projects to gauge adoption rates, but we have concerns about how eHealth Ontario defines "active" users, how reliable the active-usage rates are, and the type of usage data collected.

Differing Definitions of Active Users

Canada Health Infoway (Infoway) defines an "active user" as one who accesses at least two domains/sites containing patient medical information at least once a month. Our research found that other Canadian provinces also apply this definition.

eHealth Ontario management informed us that it uses two definitions for active users. One is similar to Infoway's, but only requires the user to access one site, not two, and it also defines an active user as one who accesses the system at least three times a quarter. Our discussions with Infoway indicated that they also accept this latter definition, which counts a health-care professional who accesses one site three times in the first month and then not again in the next two months of the quarter as an active user. Given the current technological environment, these active use definitions seem to be set very low.

eHealth Ontario contracts with other organizations, including labs and administrators of repositories and connectivity, referred to as health-delivery partners, who are responsible for tracking usage. eHealth Ontario expects these partners to follow its definition of active users, but this is not always the case. Different definitions were used for similar databases or systems and, as systems matured, definitions changed over time. These factors make it difficult to compare usage between systems or measure usage trends.

Because eHealth Ontario did not initially mandate a specific definition to be applied by the health delivery partners, they have historically applied a variety of definitions for active users, depending on the project, including: once a month, once a month within the most recent 90-day period, once in the last six months, and three times in a quarter. It also counted as active those users who knew or remembered their log-in password, or had the help desk reset their password. Only in November 2015 did eHealth Ontario ask the four Diagnostic Imaging repositories in Ontario to apply Infoway's active use definition where health-care professionals access the system at least three times a quarter. At the time of our audit, three of the four had done so, while the fourth kept its definition of an active user as one who had accessed the system once in the last six months. As a result of the different definitions applied, summarizing usage results for all four Diagnostic Imaging repositories in Ontario would not be useful.

A May 2016 benefits realization report conducted by external consultants commissioned by eHealth Ontario noted that Ontario is in a similar position as Australia, Germany and the United Kingdom—all were seeking to determine the value of implementing costly EHR initiatives without having a full understanding of adoption and usage.

In January 2016, eHealth Ontario and the three hospitals that administer the regional connectivity hubs started a project to update the definition of active use target by care setting. The project will gather an understanding of usage by type of health-care setting and the frequency of usage. It will impact both the Labs System and the diagnostic imaging system as health-care professionals can access data from these systems in the EHR connectivity viewer. eHealth Ontario expects to present this work to its board of directors in fall 2016, subsequent to the completion of our audit fieldwork.

Reliability of Active-User Data in Doubt

The active-user data that eHealth Ontario collects and reports to the Ministry could potentially be overstated, as in the case of the active-user information reported for the Labs System. eHealth Ontario advised the Ministry that 55,400 unique active users logged into the system in 2015/16.

However, this number could be overstated because, for example, a single health-care professional who logged in three separate times from a hospital, a regional Connectivity Hub and a family doctor's office would have been counted as three different users. After we brought this to eHealth Ontario's attention, they analyzed the 2015/16 user data and identified about 7,500 users who had logged in through multiple access points. Not having reliable active-user data can result in missed opportunities to direct adoption and training efforts to specific areas.

Usage Data Not Sufficiently Detailed or Consistently Collected

eHealth Ontario does not always collect active usage data by type of health-care setting or by type of health-care professional, criteria that could enable targeted efforts to increase usage. Increasing usage of the system means more patients can benefit from their health-care professionals having quicker access to available health information. In a December 2015 meeting, eHealth Ontario's board recognized that health-care professionals who work in different settings would likely access EHRs at different frequencies. For example, a physician in a hospital emergency room would probably use the system more often than one working in primary care, where most patient records are already available in their office.

For the Integration Services project, the lead hospital/hub administrator in South West Ontario maintains usage rate by care setting, such as hospital, primary care, community care and public-health units. It also maintains usage rate by type or role of health-care professional, such as family physician, imaging technologist, specialist physician or pharmacist. However, the lead hospital/hub administrator in the Greater Toronto Area did not maintain usage data by type nor did eHealth Ontario require that similar data be collected by all the administrators/hospitals. As a result, the Greater Toronto Area would not be able to determine the type of health-care professionals to whom it should target adoption rates.

Similarly, these criteria were not universally applied to usage information for the Labs System, so it was not possible to determine how health-care professionals working in various units of a hospital and in community physician offices used the system. As well, while the lead hospital in South West Ontario follows the Infoway guideline of setting a preliminary usage rate at 20% of registered users, the lead hospital in Greater Toronto set as its target 20% of *anticipated* users which, in the majority of cases, is a lower number.

This lack of consistency in types of data collected as well as usage targets set makes it difficult to conduct analysis or to identify trends or patterns of usage to determine where greater adoption and usage efforts are needed so that physicians can provide better quality of care to patients.

4.5.2 Usage Targets Not Met or Not Set

Measuring usage rates of an EHR system can help determine whether uptake is at sufficient levels to improve patient care and achieve greater efficiencies. It can also help identify which health-care organizations or types of health-care professionals to target when usage rates are below target.

In the case of the Integration Services project, in addition to the usage rate, eHealth Ontario measures the registration rate, which is the step before usage. For this project, eHealth Ontario follows Infoway's "active user" target, which initially aims to have 10% to 20% of registered users become active users, and then to eventually increase the target over time as the service becomes more widely available.

The Greater Toronto Area connectivity project did not meet the registered users target in time. eHealth Ontario originally wanted the lead hospital to register 40,540 health-care professionals by March 2013. The hospital did not achieve this total until January 2016, almost three years late. As well,

as of April 2016, only 13% of the registered users in Greater Toronto were using the regional viewer.

In the case of the Labs System, eHealth Ontario does not track usage rates for the entire system, but does maintain usage data through the different access points such as hospital information systems, and the provincial viewer. Using this data, we estimated that 34% of registered health-care professionals used the Labs System in 2014/15, and 37% in 2015/16. But neither eHealth Ontario nor the Ministry established a target user number for the Labs System, which could have been based on the Infoway target of 20% initially, and gradually increasing over time. Instead, eHealth Ontario set user target on the connectivity projects as a proxy for access to the different information systems (such as the Labs System and the Diagnostic Imaging system) that users can access through the connectivity projects. However, this measure would not identify instances where physicians continue to access lab results through means other than the connectivity projects when they bypass the regional viewers. Some physicians currently receive electronic lab results directly from larger labs that were and have been providing this service outside of the EHR initiative.

Given that the Labs System was fully functional in 2006 and became available for clinical use in 2012, it would be reasonable to expect a higher usage rate by the 2015/16 fiscal year.

In the case of the Diagnostic Imaging system, eHealth Ontario did not set user targets for any of the four regional Diagnostic Imaging repositories. Instead, as discussed in the case of the Labs System, eHealth Ontario set user target on the connectivity projects as a proxy for access to available systems, including the Diagnostic Imaging system. According to 2015/16 usage data reported by each regional repository, on average 7,600 health-care professionals accessed each repository, and actual usage by region ranged from 2% to 36% of registered users. Even though some community-based physicians can also access diagnostic images through the regional viewers in their offices using their Electronic Medical Record systems, not all of these local systems are interoperable with the regional viewers.

RECOMMENDATION 11

To ensure efforts to promote the Electronic Health Record projects are appropriately directed and to increase system adoption, eHealth Ontario should:

- establish and communicate a consistent definition of active user to be applied across the province;
- establish growth targets for active usage of each project as more registered users are given authorized access; and
- collect actual usage data by unique user and by access points, and regularly compare this data against established targets to identify areas of under-utilization that require further action.

RESPONSE FROM eHEALTH ONTARIO

eHealth Ontario accepts this recommendation and agrees that there should be a standard definition of active user. eHealth Ontario currently uses the two definitions of active users that are approved by Canada Health Infoway—health-care professionals who have either accessed the system a minimum of three times per quarter or once a month. Service delivery partners across the province have been using either one of these definitions for reporting purposes since November 2015. eHealth Ontario will work with its delivery partners to determine which is the most representative definition and communicate a consistent definition across the province.

eHealth Ontario will work with the Ministry to develop a plan to establish growth targets for registered users. eHealth Ontario established targets each year through agreements with its delivery partners. eHealth Ontario has completed an extensive review of current adopters and developed profiles of high users and low

users, which will be used to inform appropriate growth targets.

eHealth Ontario will develop a plan to implement measurement tools to collect actual usage data by unique user, access points and other types of usage data, and compare against established targets. In doing so, areas of under-utilization that require further action will be identified.

4.5.3 Physicians Not Using Available EHR Systems

We interviewed and surveyed a random sample of physicians in Ontario to gauge their awareness and usage of the EHR projects. Only 12% of the physicians who responded to our survey indicated that they fully used the available systems. The most common reasons they cited for not using the systems were lack of awareness or not knowing how to use the systems, ability to obtain the required information elsewhere and technological barriers.

We discuss these issues in the following subsections.

Health-Care Professionals Not Aware of the Functionalities of EHR Projects

Although most physicians who responded to our survey were aware of the systems we asked about—the Labs System, the diagnostic imaging system, the drug system, the Connectivity hubs, Electronic Medical Records in physician offices, and consumer eHealth (patients having access to their own records), 35% of physicians indicated they did not know how to use the systems.

Similarly, various health-care professionals we interviewed said they were unaware of the capabilities of the Labs System. In addition, we followed up with a sample of participants in a limited-production-release project for the Diagnostic Imaging central repository and found that, in some cases, the participants themselves were not even aware of the project or its capabilities.

eHealth Ontario has a province-wide communications strategy, but the strategy lacks details on areas of responsibility by specific parties and the required timelines for completion. As a result, ensuring all health-care professionals who would benefit from having more timely and complete information of their patients poses challenges.

Health-Care Professionals Needs Not Met

Health-care professionals we interviewed said that retrieving test results from the Labs System takes longer because they must first enter individual patient names, and then locate a specific test from all the results provided, including some ordered by other physicians. This concern could be addressed by making available a practitioner query function, which was not initially included in the system due to privacy, legal and technical concerns identified during pilot testing. The function was still not available at the time of our audit.

Another barrier cited was legislative—there is a legal requirement for labs to deliver results to the ordering physician within a reasonable time. Since not all physicians use Electronic Medical Records software that meets the provincial certification standards, the risk exists that some physicians will not receive lab results via the Labs System within the required time.

Finally, 38% of the physicians who responded to our survey noted that they did not need to access EHR systems because they could access data elsewhere.

Information Technology Environment Not Fully Considered

We looked into why only about 13% of the users registered to use the connectivity viewer in the Greater Toronto Area were viewing the data in the system. Health-care professionals we interviewed told us that it took very long to load data in the viewer. The system was designed to load data in seconds, but the actual loading time experienced in the Greater Toronto Area in early 2016 was up

to three minutes, which is a long time in most fast-paced health-care settings. eHealth Ontario explained that this slow response was due to a number of factors, some related to system performance that were within eHealth Ontario's control and some were related to technology configurations within the hospitals. In the case of the hospitals, no thorough assessment of individual hospital systems had been made prior to integrating their systems with the regional viewer. The impact of this lack of assessment was only apparent after the integration work was completed.

For the Labs System, we found that doctors do not find it necessary to access the Labs System to obtain these test results, perhaps because large community labs feed test results directly to individual physicians via their Electronic Medical Records.

For the Diagnostic Imaging system, two hospitals worked with eHealth Ontario in 2015 on pilot projects to test the suitability of storing images of electrocardiograms and echocardiograms (both are non-invasive cardiology tests) in the Diagnostic Imaging repository. At one test site, the electrocardiogram pilot project yielded a savings of about 780 administrative hours, worth about $16,000 in annual savings. Similarly, two sites reported that overall reading times were reduced from over five days to just one, and the volume of duplicate electrocardiograms was reduced by about 50%. eHealth Ontario did not complete the other pilot project, on echocardiograms, because of technological challenges. At the time of our audit, eHealth Ontario indicated that reports from the pilot sites were archived in the region's repository. However, both types of images from all other hospitals were not required to be included into the Diagnostic Imaging repository of the regions.

Similarly, in March 2015 and in December 2015, eHealth Ontario followed up with a sample of health-care professionals who tested a module of the centralized Diagnostic Imaging repository in 2014 to find out why they did not use the module as often as expected. Health-care professionals said that the repository did not sufficiently integrate with their own systems, it required an additional set of passwords to log in, and it did not provide access to diagnostic images generated by independent health facilities. At the time of our audit, eHealth Ontario had not made any changes to this module.

Forty-five percent of the physicians who responded to our survey cited other technological barriers as reasons for the low adoption rates, such as cumbersome log-ins, inability to readily find information, pages that were difficult to navigate, and interoperability issues.

Overall, the uptake of the EHR projects could be higher if the Ministry and eHealth Ontario had sufficiently planned for and understood the user needs and information technology environment.

RECOMMENDATION 12

To improve uptake of existing and new Electronic Health Record projects such that health-care professionals can provide better care to patients, eHealth Ontario, and the Ministry of Health and Long-Term Care (in the case of the drug information system) should:

- examine the reasons for the low uptake rates and prepare an action plan to address the root causes of the low usage rates;
- update the communication strategy to define roles and responsibilities for each project and timelines; and
- implement the practitioner query function in the Ontario Laboratories Information System.

MINISTRY RESPONSE

eHealth Ontario and the Ministry accept this recommendation and agree with the Auditor General's comments. Subsequent to the completion of the Auditor General's audit, eHealth Ontario has implemented processes to improve loading time to under four seconds for 76% of the sites in the Greater Toronto Area. In addition, eHealth Ontario has completed an extensive review of current adopters and developed

profiles of high users and low users, and will use this information to promote enhanced adoption through more tailored methods. A detailed strategy will be developed to increase the active user base, taking into account where and how the EHR is currently being viewed, and identify service delivery efficiencies and assets and sectors on which to focus contribution and viewing efforts.

The Ministry is developing its Digital Health Strategy and, once approved, roles and responsibilities will be clarified and clearly communicated.

RESPONSE FROM eHEALTH ONTARIO

eHealth Ontario accepts the Auditor General's recommendation. Lab tests are currently retrieved from the Ontario Laboratories Information System (Labs System) by health-care professionals from several sources, including two clinical viewers and through some certified Electronic Medical Records (EMRs).

eHealth Ontario piloted the practitioner query in 2015 and the lessons learned have been included in the Labs System product to be released in the 2017/18 fiscal year. Once the individual certified EMR vendors make the necessary product changes and the clinicians using certified EMRs have upgraded their systems accordingly, then they will have the ability to automatically receive reports for their patients through the practitioner query function.

Appendix 1: Key Events Relating to the Electronic Health Record Initiative in Ontario, 1999–2016

Prepared by the Office of the Auditor General of Ontario based on information provided by eHealth Ontario and the Ministry of Health and Long-Term Care

Date	Event
June 1999	• Health Services Restructuring Commission submits Ontario Health Information Management Action Plan to Minister of Health and Long-Term Care. • Action Plan recommends acceleration of information and technology investments to better capture, share and analyze health-care information. • Action Plan also recommends creation of independent, arm's-length entity to provide strong central leadership, manage implementation of Action Plan, and allocate financial resources.
2001	• Government of Canada creates and funds Canada Health Infoway (Infoway) as an independent, not-for-profit Shared Governance Corporation. • Infoway's goal is electronic health records (EHRs) for 50% of Canadians by 2010, and for all Canadians by 2016.
2002	• Ontario Government creates the Smart Systems for Health Agency (SSHA). • SSHA begins operations in April 2003 with a mandate to support Ministry of Health and Long-Term Care (Ministry) programs. It begins work on a private data network to connect Ontario's medical community.
2004	• Ministry's eHealth Program Branch created to establish and maintain an eHealth strategy and oversee delivery, including development of EHR applications and databases.
April 2007	• Ministry develops an eHealth Blueprint that provides a high-level scope and requirements from a technological viewpoint.
September 2007	• Ministry and SSHA sign an Affirmation of their Memorandum of Understanding. • SSHA's mandate is to provide "secure, integrated, province-wide information technology infrastructure to allow electronic communication among Ontario's health-service providers."
May 2008	• Government approves provincial eHealth strategy.
September 2008	• Through a regulation of the *Development Corporations Act*, Ontario government creates eHealth Ontario by combining the activities and responsibilities of SSHA and the Ministry's eHealth Program Branch into one organization responsible "for all aspects of eHealth in Ontario, including creating an Electronic Health Record for all Ontarians." • Ontario Government forms eHealth Ontario's first board of directors; no members of SSHA's board invited to join. The Premier appoints board Chair.
March 2009	• eHealth Ontario's 2009-2012 eHealth Strategic Plan published. • Strategic Plan describes activities to be undertaken, targets delivery of an EHR system by 2015, and outlines three clinical priorities: diabetes management, medication management and wait times.
April 2009	• Ministry and eHealth Ontario sign a Memorandum of Understanding and a Transfer Payment Agreement setting out their respective accountability.
October 2009	• Auditor General releases Special Report on Ontario's Electronic Health Record Initiative. • Audit identifies a lack of comprehensive strategic plan, weak oversight and slow progress of projects, and excessive use of external consultants.
June 2010	• Ministry issues a mandate letter to eHealth Ontario, directing agency to focus its efforts on 12 projects essential to implementation of an EHR.
December 2010	• Treasury Board/Management Board of Cabinet approves eHealth Ontario's submission outlining agency's understanding of the key projects and deliverables needed to complete the foundational components of the EHR.
September 2012	• eHealth Ontario terminates contract with vendor for implementation of Diabetes Registry, resulting in an arbitration award of $26.9 million.

Date	Event
March 2013	• Ministry halts eHealth Ontario work on a Drug Information System.
March 2014	• Report issued based on strategic review of the status of eHealth at the Ministry's request. The review, conducted by two former Ontario public servants, covers the Ministry, eHealth Ontario and all other parties involved in achieving an EHR for all Ontarians by 2015.
November 2014	• eHealth Ontario publishes the revised eHealth Blueprint, which establishes a common framework and consistent terminology to support business service needs, the health information needed and the technical solutions needed.
March 2015	• Ministry creates new eHealth Investment and Sustainment Board, chaired by the Deputy Minister of Health and Long-Term Care, and consisting of representatives from the Ministry, selected LHINs and eHealth Ontario. • Deadline for completion of 12 key EHR projects listed in the June 2010 mandate letter to eHealth Ontario.
May 2015	• Ministry takes over the Drug Information System and redesigns it. System still under development at the time of our audit.
July 2015	• eHealth Ontario issues Connectivity Strategy, detailing how health-care information will be connected to form the EHR of the future.
April 2016	• Report issued by external consultant to conduct mandate review of eHealth Ontario as required under the Agencies and Appointment Directive.

Appendix 2: Description, Potential Benefits and Project Status of All 12 Planned Electronic Health Record (EHR) Projects in Ontario as of March 2016

Prepared by the Office of the Auditor General of Ontario based on information provided by eHealth Ontario and the Ministry of Health and Long-Term Care

	Projects*	Component Description	Potential or Realized Benefits	Status as of March 2016
1.	Ontario Laboratories Information System	Connects hospitals, community laboratories, public-health laboratories and health-care professionals to allow for the secure electronic exchange of lab test orders and results. What it means to the patient: a family doctor can, for example, electronically access the results of a blood test regardless of where in Ontario it was taken.	Timelier access to test results for health-care professionals, better monitoring of laboratory history and treatment progress, reduced number of unnecessary lab tests.	In progress
2.	Diagnostic Imaging	Gives health-care providers electronic access to patients' diagnostic images and reports. What it means to the patient: an X-ray taken at a North Bay hospital, and the accompanying report, could be accessed electronically by a specialist in Toronto.	Eliminates need to physically transfer images to physician, reduces wait times for tests and results due to faster access, reduces duplicate and unnecessary exams.	In progress
3.	Integration Services	Connects all of the different EHR systems using a standardized approach. What it means to the patient: provides health-care professionals with secure electronic access to a wide variety of patient health information residing in a variety of systems.	More timely care because health-care professionals can quickly access patient data regardless of when or where tests were completed.	In progress
4.	Drug Information System	Electronic database allows physicians to electronically prescribe new medications, and physicians, pharmacists and nurses to electronically view and access information about patients, including their medications. What it means to the patient: if a patient arrives unconscious at hospital emergency department, attending physician can access the system to review medications that patient is taking and determine which drugs to administer so there will be no adverse reaction.	Ability to access medication information when patients are unable to communicate, reduction of repeated information, and prevention of drug reactions.	Ministry took over the project from eHealth Ontario in May 2015
5.	Diabetes Registry	Electronic system to manage diabetes treatment by providing health-care professionals access to OHIP claims and lab test results, producing reminders and reports for appointments, and manage the care of patients according to recommended guidelines. What it means to the patient: active management of diabetes results in fewer complications such as heart disease, blindness and kidney failure, which means lower costs to treat people with diabetes.	Reduction in number of lab tests, easier and faster access to results, reminders and alerts to reduce missed appointments, and fewer emergency room visits.	eHealth Ontario cancelled the project in September 2012

	Projects*	Component Description	Potential or Realized Benefits	Status as at March 2016
6.	Physician eHealth	Program within eHealth to provide funding and support to community-based health-care providers to adopt electronic-medical-record systems. Electronic medical record systems allow physicians to electronically collect, manage and share health information. What it means to the patient: family physicians can access a patient's EHR on their own office computer to review patient's lab results and diagnostic images to help make clinical decisions and create efficiencies in getting required patient information on a timely basis.	Timely access in the physician's office to all patient test results, such as blood tests, x-rays, MRIs and hospital reports. This gives physicians a complete health picture of the patient and can reduce the time required to make a referral to another physician or specialist.	In progress
7.	Client, Provider, and User Consent Registries	Databases that store information on patients, health-care providers and users of the entire EHR system. Patient information is linked to one profile for that individual, regardless of what test was done, where it was carried out or who their physician is. Patient identifying information such as health card number is stored to allow for the linking of information to test results. Provider information is stored to ensure that physicians and other licensed health-care providers have appropriate access to patient records. Patients can specify who can or cannot access their health information.	Reduction of time in searching for patient information from different sources, reduction in duplicate tests, and increased security and privacy.	In progress
8.	Client, Provider, and User Portals	A web-based viewer that provides health-care professionals with real-time access to patients' electronic medical information, all in one place. What it means to the patient: physician access to portals to review data on lab results, x-rays and other images can cut wait times and unnecessary duplicate tests, and improve quality of care.	Improved communication and care transitions for patients, reduced duplication of lab and diagnostic tests, and timely access to the needed patient health information.	In progress
9.	Consumer eHealth	Patients can electronically view their health information on their personal computer. What it means to the patient: a patient can view, for example, their blood-test results by logging on from home at any time, helping people manage and contribute to their own care.	Reduction in the number of visits to doctors to obtain test results.	No plans yet
10.	Panorama	Provincial immunization and pandemics management system that electronically tracks and stores information on immunizations of children in daycares and schools, and those vaccinated at public-health clinics. What it means to the patient: a child severely cuts her finger on a rusty nail, requiring medical attention. Doctor can access child's immunization history to determine if a tetanus shot is needed based on date of the last immunization, helping to avoid unnecessary new tetanus shot.	Reduction of time in reviewing patient immunization history, prevention of duplication of immunizations.	System contains only immunization records of school-aged children

	Projects*	Component Description	Potential or Realized Benefits	Status as at March 2016
11.	Chronic Disease Management	Management of chronic diseases that involves the connecting and sharing of the components of the provincial electronic health record to enable health-care professionals to access patient information for patient care. What it means to the patient: helps physicians to access patient test results and other health information such as electrocardiograms to help manage the chronic disease to prevent the condition from worsening.	Increased patient safety and prevention, and improved management and outcomes for those with chronic diseases.	In progress
12.	Technology Services	Core technology services that help ensure EHR systems and databases function smoothly and reliably. What it means to the patient: EHR systems function well, with a minimum of down time, ensuring EHRs are always there when needed.	EHR data is delivered to providers and users on eHealth Ontario's secure private network and through encrypted Internet connections.	Completed

* Listed in the Ministry's 2010 mandate letter to eHealth Ontario.

Ministry of Advanced Education and Skills Development

Employment Ontario

1.0 Summary

Employment Ontario offers a suite of programs designed to provide employment and training services to job seekers and employers, apprenticeship training to students seeking certification and employment in a skilled trade, and literacy and numeracy skills to people who lack basic education necessary for employment. These programs are funded by the Ministry of Advanced Education and Skills Development (Ministry), and the majority are delivered by third-party agencies.

In order to support the Province's economic growth and help ensure Ontarians have long-term sustainable employment, it is important that these programs meet the needs of Ontario's current and future labour market. While Ontario's annual unemployment rate (6.8% in 2015) has generally been in line with the national average, its youth unemployment rate (14.7% in 2015) has been consistently higher than the national average over the last decade by two percentage points.

Our audit found that key programs offered by Employment Ontario are not effective in helping Ontarians find full-time employment. Although the Ministry is redesigning some of its existing programs, more attention is needed to increase their effectiveness and improve efficiency. Specifically, the Ministry needs to take additional steps to increase completion rates for apprentices, and to help people sustain long-term employment in their field of training. We also noted that the Ministry lacks the detailed and timely labour market information necessary to both improve existing programs and develop new ones to meet the current and future labour needs of Ontario. Some of the significant issues we found include:

- **Majority of employment and training program clients unsuccessful in finding full-time employment in their chosen career.** The objective of Employment Ontario's Employment Service program is to find long-term sustainable employment for clients. For 2015/16, at the time of completion of the program, only 38% of clients were employed full-time and only 14% had found employment in either their field of training, a professional occupation or a more suitable job than before the program. Similarly, in Employment Ontario's Second Career program, which is intended to retrain unemployed and laid-off workers for high-demand jobs, 35% of clients reported being employed when they completed the program, but only 17% were employed full-time, and only 10% were employed in either their field of training, a professional occupation or a more suitable job at time of completion of the program.

- **Overpayments to clients who do not complete programs are not being recovered.** Participants in Employment Ontario's Second Career program who receive funding for retraining but do not regularly attend their program or provide receipts are required to repay the Ministry. In the last three fiscal years, $26.6 million that should have been repaid has been written off as uncollectible.
- **Less than half of the people who begin an apprenticeship program in Ontario complete it.** The average completion rate for apprentices in Ontario (from 2011/12 to 2015/16) was about 47%. Completion rates for voluntary trades were significantly lower than for compulsory trades (35% vs. 59%). Comparable completion results from other jurisdictions were not available because provinces do not follow a single standard method to calculate completion rates for apprentices.
- **Ministry needs to better analyze and address reasons for low apprenticeship completion rates.** The Ministry does not review apprentice completion rates by in-class training provider or employer, and it does not compile and analyze survey results separately (for the majority of questions) for those that completed their apprenticeship program and those that withdrew. Such analyses would enable the Ministry to identify those in-class and on-the-job training providers that may not be preparing apprentices for success, and assess the reasons why apprentices did not complete their apprenticeship. We analyzed apprenticeship completion rates by employer and found that, for employers who have sponsored at least 50 apprentices since the beginning of the program, there were approximately 100 employers that had a low success rate (i.e., less than 20% of their apprentices complete their apprenticeship) but were still actively training almost 4,800 apprentices.
- **Financial incentives to employers may not be encouraging apprentice certification.** In 2015/16, about 60% ($205 million) of all apprenticeship funding was paid to employers through a combination of the Apprenticeship Training Tax Credit, a signing bonus and a completion bonus. The first two financial incentives support apprentices entering the program, but are not tied to employers ensuring apprentices complete the program. The completion bonus, which is more closely aligned with the Ministry's goal of increasing the number of apprentices that get certified, is half the amount of the signing bonus.
- **Number of apprentices at risk of non-completion remains high even after implementation of a monitoring strategy.** The Ministry began monitoring at-risk apprentices in November 2014. At that time, 16,350 apprentices were identified as being at risk of not completing their apprenticeships. About 68% of these cases were resolved by having the apprentice exit the system, in effect cleaning out the Ministry's database. However, by June 2016, the number of apprentices at risk increased to 39,000. Of these, 20,800 were apprentices identified under the same definition as that used in November 2014, and an additional 18,200 apprentices were identified under an expanded definition. Regardless of the definition used, the number of at-risk apprentices has increased during the last 1.5 years since the monitoring strategy was introduced.
- **Ministry's monitoring of apprenticeship training is limited.** Although the Ministry has processes in place to assess an employer's qualifications at the time they submit an application to train an apprentice, it relies on employers to self-report any changes that may affect their ability to provide sufficient training, such as a change in the number of trainers available to the number of apprentices. Local Ministry offices we visited during our audit confirmed that their involvement with employers is very limited and noted that they visited employers primarily when complaints were

received. With regard to in-class training, the Ministry evaluates whether training delivery agents have the tools and resources to deliver courses when they are initially approved for funding, but any monitoring by the Ministry after that point is complaint driven. Ministry staff informed us that they do not directly assess whether instructors are qualified and whether the courses are taught according to the curriculum, nor do they compare the qualification exam pass rates by training delivery agent to identify those with comparatively high failure rates.

- **Ministry lacks necessary data to ensure Employment Ontario programs meet current and future labour needs.** The Ministry does not collect or analyze regional information on labour force skills supply and demand to identify what jobs will have a shortage of skilled workers. According to the Ministry, there are few reliable sector-wide sources of information on employers' anticipated labour needs. The Ministry does publicly report certain labour market information every month (such as unemployment rates by metropolitan areas, and rate of employment growth by highest level of education completed and major occupation groupings); however, this information is not specific to particular jobs or trades to allow for an assessment of the supply or demand for specific occupations. Also, every four years the Ministry reports on the likelihood of people finding employment in various jobs in Ontario. Other provinces, such as British Columbia and Alberta, report projected demand by occupation for a 10 year period that they update annually and biannually respectively.

This report contains 18 recommendations with 35 action items.

OVERALL MINISTRY RESPONSE

The Ministry appreciates the work of the Auditor General and her staff in examining Employment Ontario's programs and services. We value the observations and recommendations provided as a result of this audit.

While the Employment Ontario network helped approximately one million Ontarians in 2015/16, including over 122,800 employers across Ontario, we agree there is opportunity to transform Ontario's employment and training system to better meet client need, improve outcomes and ensure our resources are targeted most effectively.

We remain committed to ensuring clients get the skills they need to find employment, including providing effective supports to help apprentices complete their training and become qualified journeypersons. The Ministry is undertaking a multi-faceted, long-term transformation agenda to modernize and integrate Ontario's employment and training programs.

Following the recommendations of the Highly Skilled Workforce Expert Panel, the Ministry is developing and implementing a strategy to help the workforce adapt to the current and future demands of a technology-driven knowledge economy.

The Ministry is committed to reviewing and continuously improving client outcomes and ensuring program alignment with current and future labour market demands. As such, the Ministry has already begun to take the following steps:

- improved information technology support to help the Ministry better manage client cases, and reduce the number and level of potential overpayments to clients;
- exploring new and enhanced sources of labour market information to identify the most high-demand occupations and better support Ministry planning;
- reviewing employer supports for apprentice training to support completion rates and increase apprenticeship opportunities; and
- increased the criteria to expand the scope of apprentices to be monitored to those for

whom early intervention and supports could lead to timely completion.

The Ministry will review the Performance Measurement Framework for Employment Ontario programs, in order to track and ensure the program guidelines are achieving sustainable and long-term employment outcomes for clients. The Ministry commits to publish outcome data as part of the government's commitment to open data.

2.0 Background

2.1 Employment Ontario

Employment Ontario provides employment and training services and related information for both job seekers and employers. Services for job seekers include job listings, career counselling, training for skilled trades, literacy and other foundational skills development, and referrals to other employment-related services. Employers can access services such as posting a job on the Ministry's job bank website, and apply for incentives to hire people, train apprentices in skilled trades and provide additional training to their staff.

As of March 31, 2016, there were 27 programs and services offered under Employment Ontario by 400 third-party service providers. Three of these programs (Self-Employment Benefits, Summer Jobs Service, and Youth Employment Fund) were discontinued in 2015/16 and are winding down. Programs and services are clustered under the following four categories:

- **Employment and Training**—10 programs and services that provide supports to people seeking employment and incentives, and grants for employers.
- **Apprenticeship**—nine programs and services to ensure workers receive the required combination of workplace and classroom training to become certified and employed in a skilled trade.
- **Foundational Skills**—two programs and services comprising literacy and numeracy skills upgrading for those who lack the necessary basic education for employment, and bursaries for internationally trained professionals completing programs at colleges and universities in order to learn Canadian standards applicable to their profession.
- **Labour Market**—six programs and services that provide planning and capacity building for employment and training at the community level and provide local employment services following large-scale layoffs.

Appendix 1 includes descriptions and funding amounts for all 27 Employment Ontario programs and services delivered by third-party service providers and the tax credits and bonuses paid in certain situations to employers and individuals.

2.2 Roles and Responsibilities

The Ministry of Advanced Education and Skills Development (Ministry)—formerly the Ministry of Training, Colleges and Universities—is responsible for the funding and management of programs and services offered under Employment Ontario. The Ministry develops policy for adult education and labour market training. It also works with the Ontario College of Trades to set standards for occupational training, such as trade certification and apprenticeships. In addition, the Ministry operates some services directly, such as the Employment Ontario Contact Centre (a toll-free number and live chat service that offers information on employment and training programs and referrals to employment-related services) and the online Job Bank, which connects employers and job seekers and allows job searches anywhere in Ontario and Canada. Employment Ontario is administered by the Ministry's Employment Training Division (Division). The Division manages four regional offices (Central – Toronto; Eastern – Ottawa; Western – London; Northern – Sudbury), which are further divided into 39 local field offices. In total, the Division has over 800 staff.

However, the majority of programs and services under Employment Ontario are delivered through a network of about 400 mostly not-for-profit service providers at about 740 service delivery sites. Service providers include community-based employment service providers; literacy providers such as publicly funded school boards; colleges of applied arts and technology; and other non-college apprenticeship training delivery agents such as unions, employment associations and large employers.

The Division's staff is responsible for providing operational oversight, monitoring service quality, tracking financial information and managing contracts with third-party service providers. Contracts with service providers typically include project descriptions, eligibility requirements, budgets, required reporting to the Ministry and performance commitments.

2.3 Funding

In 2015/16, the Division spent $1.3 billion, of which approximately two-thirds (or $841.1 million) came from the federal government, to support employment programming, some of which was previously delivered by the federal government to Ontario residents.

The Ministry receives federal funding under three separate agreements with the federal government. These agreements include reporting requirements such as audited financial statements, annual plans outlining priorities and planned activities, and performance targets and results.

Prior to 2007, there were approximately 500 third-party service sites across the province receiving funding directly from the federal government, while Ontario also had its own employment services delivered through a program called Job Connect (basically, the current Employment Service program). Beginning January 1, 2007, the federal government transferred ongoing responsibility for the design and delivery of employment and skills training programs to Ontario. As a result, the Ministry inherited the federally funded service providers and 568 federal employees, and underwent a process to reduce the network of Employment Service providers in 2014 to its current number of 171.

Figure 1 shows the total payments the Ministry made over the last five years to third-party service providers under each of the four Employment Ontario program categories.

2.4 Key Programs

Nearly 90% of the total transfer payments provided by Employment Ontario to third-party service providers are for programs and services under the Employment and Training and Apprenticeship categories.

2.4.1 Employment and Training

Key Employment and Training programs are Employment Service—a network of third-party service providers that deliver career counselling and support services for people at the community level; and Second Career—a program that funds skills training in high-demand occupations for people who are unemployed or have been laid-off. Combined, these two programs receive two-thirds

Figure 1: Payments to Third-Party Service Providers in the Four Core Program Categories, 2011/12–2015/16 ($ million)

Source of data: Ministry of Advanced Education and Skills Development

of the funding in this category (see **Appendix 1**). **Appendix 2** details the roles and responsibilities of both the Ministry and third-party service providers delivering employment and training programs.

Employment Service

The goal of Employment Service is to help people find sustainable employment. Individuals can find out about employment and training services by visiting an Employment Service provider or one of the Ministry's local field offices located across the province; by calling the Employment Ontario Call Centre; or by accessing the Ministry's website. In 2015/16, 673,000 people were served by third-party service providers funded by the Ministry. The majority of clients required minimal intervention (478,000) and were served through low-cost, self-serve tools such as outlines and tips for creating a resume. The remainder (195,000) required more intensive, tailored intervention to meet their individual needs, such as coaching people for job interviews. These people are referred to as assisted clients. Services provided, whether to assisted or unassisted clients, include:

- Client service planning and co-ordination, which provides the initial point of contact for people to access Employment Service. Service providers meet with clients to explore their career, employment and training goals and direct them to the appropriate services.
- Resource and information, providing an unassisted resource available to everyone in the community that includes information on local training and employment opportunities, community service supports, occupational and training requirements, and resources to support unassisted job search.
- Job search guidance, offering individualized assistance in career clarification and goal setting, skills and interest assessment, and interview and employment preparation.
- Job matching, placement and incentives to match client skills and interests with employment opportunities and employer needs. Clients using this component need work experience or on-the-job training placement for which the employer may receive an incentive up to $8,000 per individual.
- Job and training retention for those needing further help or counselling to succeed. This includes enhanced coaching, mentoring and follow-up for participants and employers who are unlikely to succeed without further assistance during and after employment and placement.

The Employment Service program is delivered across the province at over 320 sites run by 171 third-party service providers. Approximately 95% of these service providers are non-profit organizations, while the remaining providers include publicly funded school boards and some for-profit businesses.

The Ministry funds third-party service providers for operating costs, employer incentives for hiring program participants and client supports to reduce barriers to employment (such as providing bus fare and suitable clothing for job interviews). Funding is determined for each site operated by a service provider by taking into consideration the targeted number of clients to be serviced, employment and demographic conditions within the community where the site operates (labour market indicators), and the relative costs of doing business in that community (location indicators). For a more detailed description of the funding model, see **Appendix 3**.

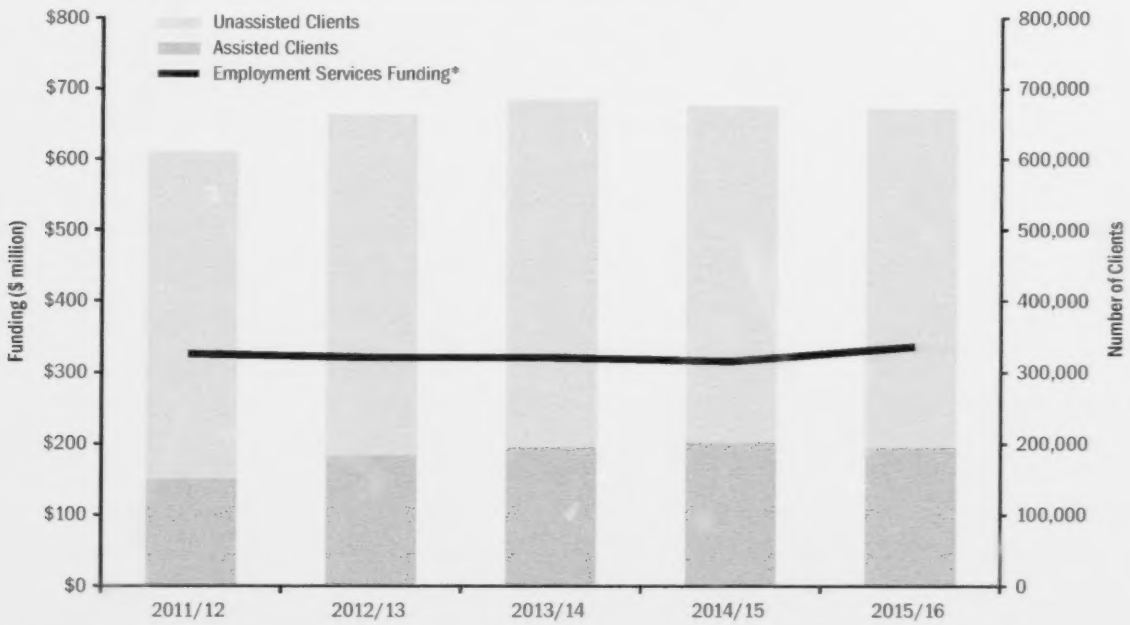
For the five-year period from 2011/12 to 2015/16, Ministry funding for the Employment Service program increased by 8% (or 2% when adjusted for inflation), while the number of assisted and unassisted clients served increased by 29% and 4% respectively, as illustrated in **Figure 2**.

Second Career

The Second Career program supports unemployed or laid-off individuals that require skills training to find employment in high-demand occupations in

Figure 2: Five-Year Trend in the Number of Clients and Funding for Employment Services, 2011/12–2015/16

Sources of data: Ministry of Advanced Education and Skills Development, and Statistics Canada



* Adjusted for inflation.

Ontario. The goal of the program is to return individuals to employment in a career of their choosing. The program is administered directly by the Ministry through its 39 local field offices.

To be eligible for the Second Career program, a candidate must demonstrate that the career they want to train for is in demand by providing evidence of employment prospects within the province. Employment Service program service providers assess clients for eligibility and help them complete an application for Ministry review and approval.

Once deemed eligible and suitable for the Second Career program, the Ministry determines the amount of funding to provide to the client by assessing their financial needs, taking into consideration basic living expenses and household income from all sources. Approved clients then enter into a contract with the Ministry. In 2015/16, 8,600 people began skills training for high-demand occupations such as transport truck drivers and heavy equipment operators.

Assistance is provided to cover all or a portion of the cost of tuition and/or living expenses up to $28,000. Additional assistance may also be provided to cover all or part of the incidental costs of participation, such as expenses relating to child care, disability needs, transportation and accommodation.

The median amount of funding received by an individual that completed the program decreased from $14,900 for those that started in 2011/12 to $14,000 for those that started in 2014/15, which represents a 6% decrease in individual funding.

Monitoring and Measuring Employment Service and Second Career Service Provider Performance

The Ministry has developed an accountability framework that describes the three primary activities used to monitor service providers (completion of risk assessments of service providers' operations;

site compliance visits; and review of key performance indicators), in order to determine the appropriate level of Ministry oversight required.

The purpose of a risk assessment is to ensure a service provider can deliver contracted employment services. According to Ministry policy, a risk assessment is to be completed by the Ministry for each service provider every two years for low-risk providers and annually for medium and high-risk providers. Areas of risk examined during the assessment are governance and organizational; service delivery and operational; financial; human resources; technology and information; and legal and compliance. The service provider is required to develop an action plan to correct any deficiencies identified during the risk assessment. The Ministry's policy is to follow up on progress with action plan items on an annual basis for those assessed as low and medium risk, and every six months for those assessed as high risk.

The purpose of a site compliance visit is to ensure the service provider is in compliance with the requirements set out in both their contract and Ministry guidelines. Site compliance visits must be completed annually by the Ministry for each Employment Service site. During a site compliance visit, Ministry staff review the resources and information on site; verify that information reported in the Ministry's information system agrees with source documents; and conduct an informal client survey of a minimum of two clients or participants on site. Ministry staff document any instances of non-compliance noted during the site compliance visit and set a deadline for the service provider to address the issue. Almost all sites were visited in each of the last two fiscal years.

The purpose of the Ministry's performance management system is to evaluate service providers in the areas of effectiveness, customer service and efficiency. There are corresponding indicators for each area, as shown in **Figure 3**. The indicators are used to calculate a service quality score. There is a minimum service quality score set by the Ministry. In addition, each service provider has an individual targeted service quality score as specified in their agreement with the Ministry.

Where any funded service delivery site is not meeting the Provincial service quality standard score, the Ministry continues to fund operations at the site while it increases its monitoring efforts through either:

- **Directed improvement process**—for a service provider that is not in compliance with the minimum Provincial service quality standard. The service provider is required to submit an action plan to address the risks identified within 10 business days. The time frame for achievement of the action plan deliverables is six months.
- **Official review**—for a service provider site that is meeting the minimum Provincial service quality score but is not in compliance with its agreement (such as not following up with clients or not submitting reports as required) and not achieving the improvement targets agreed to in its prior year's business plan. In such cases, the Ministry recommends that the service provider submit an action plan within five business days signed by the Board Chair that addresses the risks identified and includes a timeline for implementation that should not exceed six months.

Ministry employment training consultants are assigned to monitor service providers. On a quarterly basis, the consultant summarizes performance, funding information and issues resulting from monitoring activity for each service provider site. This information is intended to support regional risk management and inform future service delivery and funding decisions that pertain to the site and/or service provider.

2.4.2 Apprenticeship

Apprenticeship combines on-the-job and in-class training in a skilled trade. In Ontario, there are 156 different skilled trades in four main sectors: construction (such as electricians and plumbers),

Figure 3: Performance Management System for the Employment Service Program

Source of data: Ministry of Advanced Education and Skills Development

Areas of Evaluation and Performance Indicators (% of Total Score)	Purpose of Indicator	Minimum Provincial Standard (%)	Achieved by Service Providers in 2015/16 (%)	
			Provincial Average	Range
Effectiveness (50%)				
Participant suitability (15%)	Intended to ensure that services are provided to those clients most in need of assisted services. (Assisted) clients served must possess at least 28% of the suitability indicators established by the Ministry for target group.	28	32	24–44
Service impact (35%)	Intended to measure the impact or outcome of the services provided with employment being the primary outcome. At time of exit, 69% of assisted clients served are expected to be employed, and an additional 10% are expected to be in an educational program that provides a certificate or diploma (secondary/post-secondary) or in training (including ESL/literacy).	79	82	55–96
Customer Service (40%)				
Customer satisfaction (15%)	A measure of how likely assisted clients and employers are to recommend the employment services they received to others.	90	98	87–100
Service co-ordination (25%)	Intended to track how well a service provider supports access to and from other services within the Employment Ontario network and in the community. The goal is that 30% of assisted clients will be referred to or from other services, educational training, or community services that support employability.	30	41	22–95
Efficiency (10%)				
Assisted services intake (5%)	The number of assisted clients for which the service provider has developed an employment service plan.	90	95	40–432*
Information sessions/workshop activity (5%)	Used as a proxy for activity in the resource and information area which service providers are required to have to support unassisted job search. Service providers expected to meet 90% of the contracted targets for assisted intake clients and delivery of workshops.	90	151*	39–685*

* Achievement exceeded 100% of established target because more people served than originally targeted.

motive power (such as automotive mechanics), industrial (such as tool and die makers and welders), and service (such as child-care workers). Twenty-two of these skilled trades are designated compulsory and 134 are designated voluntary. Compulsory trades are mainly in the construction and motive power sectors, whereas voluntary trades exist in each of the four sectors. People working in a compulsory trade must be certified through a final examination process in order to practise legally in Ontario. People in some voluntary trades may also choose to be certified in this manner (such as a general carpenter or an industrial electrician) even though it is not legally required, because it increases the level of professional respect and public confidence in the trade and is valued by some employers and unions. The certification process differs by trade and is intended to ensure an apprentice has the technical and hands-on skills to meet industry standards.

According to the Ministry, the average age of an apprentice at time of registration is 27, and training can take from two to five years to complete. Approximately 85%–90% of apprenticeship training takes place on the job, while the other 10%–15% of training is in the classroom. Apprentices are paid by their employer during their on-the-job training, but typically not during in-class training. Apprentices may apply for Employment Insurance if eligible. Once apprentices successfully complete their training, their employer may choose to retain them as fully qualified tradespeople.

The Ontario College of Trades (College) was established through legislation by the Ministry in 2013 as the regulatory body for skilled trades in Ontario. The College is responsible for setting on-the-job training requirements and curriculum for in-class training. See **Appendix 4** for further information about the College.

Ministry Funding and Monitoring of Apprentices

The Ministry subsidizes the cost of in-class apprenticeship training, provides financial supports to apprentices (such as loans for tools), and provides financial incentives to employers, including:

- **Apprenticeship Training Tax Credit**—Employers can receive a tax credit of up to $15,000 for each apprentice they hire and train ($5,000 per year for the first 36 months of training). The tax credit follows the apprentice; therefore, if the apprentice changes employers, the unclaimed portion of the tax credit can be claimed only by the new employer. For the last five fiscal years, employers have claimed a total of $1.15 billion in tax credits. This tax credit is claimed on the employer's tax return and is processed by the Canada Revenue Agency.
- **Signing Bonus**—Employers who hire an apprentice who is a participant of an Employment Service program will receive $2,000 from the Ministry. The payment is made in two equal instalments: at the time a training agreement is registered with the Ministry and six months after registration if the apprentice is still working for the employer. Employers typically hire few apprentices through the Employment Service program. For the last five fiscal years, the Ministry has paid a total of $3.2 million in signing bonuses.
- **Completion Bonus**—Employers receive a one-time taxable $1,000 bonus from the Ministry for each apprentice who completes their training and becomes certified under their employment. For the last five fiscal years, the Ministry has paid a total of $27.8 million in completion bonuses.

At the time of our last audit of the Apprenticeship program in 2008, the Ministry's priority for this program was increasing the number of registered apprentices. When we conducted our follow-up in 2010, the Ministry was switching its focus to increasing the number of apprenticeship completions.

The Ministry's monitoring of the apprenticeship program is conducted primarily through surveys. Two surveys are conducted annually:

- **Student Satisfaction and Engagement Survey** of in-class apprentice training, which has been completed by colleges since 2013/14 and by non-colleges commencing in 2015/16. The survey obtains apprenticeship feedback on program usefulness, learning experience, quality of service and quality of facilities, as well as an overall satisfaction rating. Surveys are administered by the training delivery agents rather than by the Ministry, and responses are compiled by an independent research firm on behalf of the Ministry.
- **Apprenticeship Survey** of people who completed their apprenticeship and those who withdrew. This survey was developed by the Ministry, and is administered by Ipsos Reid.

Apprentices who are not progressing through their programs can have their registration cancelled, suspended or proposed for suspension by the Ministry. An apprentice can also have their registration cancelled by the College if they don't pay their membership fee. The apprenticeship program in Ontario is described in further detail in **Appendix 5**.

Size of the Apprenticeship Program

As of March 31, 2016, there were approximately 85,800 active apprenticeships, 26,700 employers acting as sponsors to provide on-the-job training, and 67 training delivery agents (comprising Ontario's 24 colleges of applied arts and technology and 43 non-colleges) providing in-class training. **Figure 4** breaks down the number of skilled trades, apprentices and employers by sector as at March 31, 2016.

Five-year trend data on the number of apprentices, employers and the amount of Ministry funding (adjusted for inflation) for apprenticeship programming is shown in **Figure 5**. Between 2013/14 and 2014/15, there was a significant drop in the number of apprenticeships (32%) and employers (24%). The drop coincided with the establishment of the College in 2013. According to the Ministry, many apprentices in voluntary trades (who are not required under legislation to register with the College) opted out of registering and paying membership dues, in effect cancelling their apprenticeship training agreement with the Ministry and withdrawing from the apprenticeship program. However, since the number of apprentices that had in-class training remained relatively constant from one year to the next, total payments to training delivery agents also remained relatively constant.

In 2015/16, approximately 76% of apprentices entered into apprenticeships with an employer independently, 4% found an employer to train them through the Employment Service program, and the other 20% entered through the Ontario Youth Apprenticeship program, an Employment Ontario program that offers youth the opportunity to train as an apprentice while completing high school.

Figure 4: Number of Trades, Apprentices and Employers by Sector as at March 31, 2016

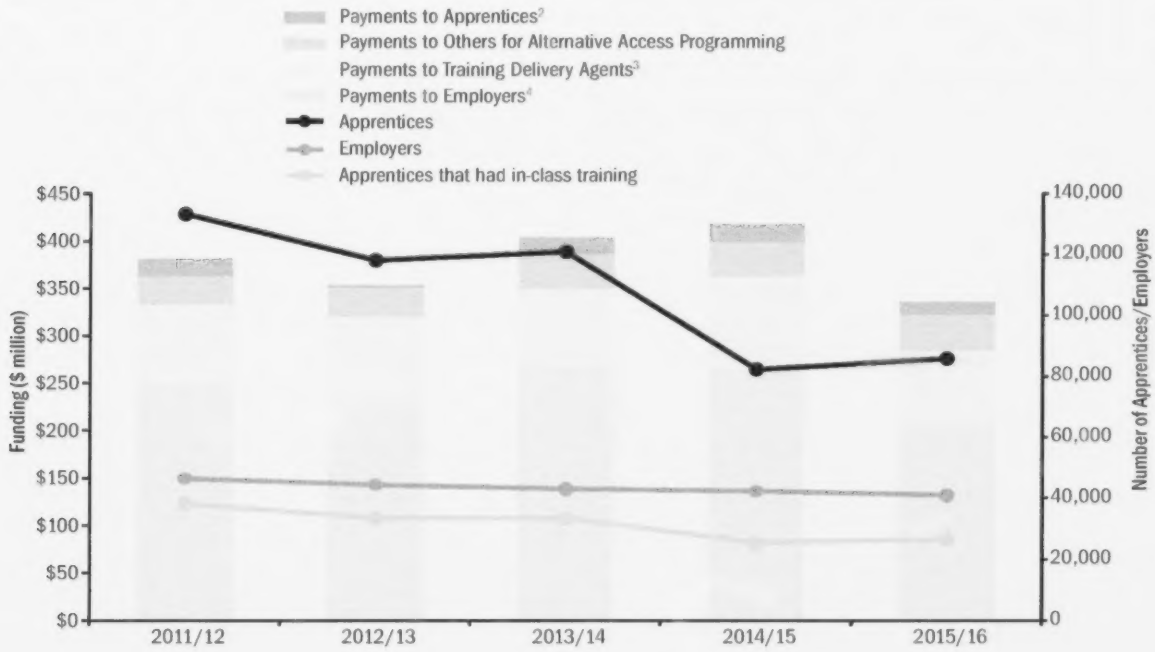
Source of data: Ministry of Advanced Education and Skills Development

	Number of Active Trades			Number of Apprentices			Number of
Sector	**Compulsory**	**Voluntary**	**Total**	**Compulsory**	**Voluntary**	**Total**	**Employers**
Construction Trades	11	29	40	20,100	15,100	35,200	9,000
Service Trades	1	34	35	4,700	16,100	20,800	7,000
Motive Power Trades	9	11	20	14,800	2,000	16,800	7,500
Industry Trades	0	45	45	–	13,000	13,000	3,200
Total	**21**	**119**	**140***	**39,600**	**46,200**	**85,800**	**26,700**
% Breakdown	15	85	100	46	54	100	

* Although there are 156 skilled trades in Ontario, only 140 trades had apprentices as at March 31, 2016.

Figure 5: Five-Year Trend in Apprenticeship Funding,[1] Apprentices and Employers, 2011/2012–2015/16

Source of data: Ministry of Advanced Education and Skills Development. Inflation adjustment factors obtained from Statistics Canada



1. Adjusted for inflation.
2. Payments to apprentices include loans for tools and other income support programs.
3. Payments to training delivery agents comprise funding for delivering in-class training, including funding for examination preparation courses.
4. Payments to employers comprise the Apprenticeship Training Tax Credit and bonuses paid to employers when they take on an apprentice and when the apprentice successfully completes their program. The Apprenticeship Training Tax Credit is managed by the Ministry of Finance but since 2012/13 has been recorded as an expense of the Ministry of Advanced Education and Skills Development.

2.5 Labour Market Planning

In addition to the funding and oversight of Employment Ontario programs, a key responsibility of the Ministry is to ensure that these programs meet both the current and future labour needs of Ontario. Timely provincial and local labour market information, such as data on in-demand jobs that are projected to have a shortage of skilled workers, is necessary to make informed decisions when developing employment training programs or undertaking workforce planning.

Labour market information collected and reported publicly by the Ministry every month includes unemployment rates by metropolitan areas within the province, and in comparison to Canada overall; and the rate of employment growth by highest level of education obtained (e.g., high school or university) and by major occupation groups (such as health; management; and trades, transportation and equipment operators and related occupations). The Ministry informed us that the primary source of this data is Statistics Canada's Labour Force Survey. This information is not specific to particular jobs or trades to enable an assessment of the supply and demand for specific occupations.

The Ministry periodically develops employment prospect ratings that compare the likelihood of residents finding work in about 200 occupations in Ontario. This information was last developed in 2013 for the period 2013–17 using data from the

federal government's Canadian Occupational Projection System and forecasts from the Ministry of Finance. The latest projections from the Canadian Occupational Projection System were based on data obtained from the 2011 Labour Force Survey that was released in 2013. These projections are normally updated every two years, but the most recent updates have been delayed by Statistics Canada. Therefore, the information used for the projections are five years out of date. The Ministry rates employment prospects by occupation as either "Above Average," "Average," or "Below Average," with respect to the likelihood of finding stable work in that occupation and the pace of wage increases relative to those in other industries or occupations.

3.0 Audit Objective and Scope

Our audit objective was to assess whether the Ministry has effective systems, processes and procedures in place to:

- ensure programs and services are being delivered in accordance with established program requirements;
- ensure that the Ministry and its delivery agencies are providing programs and services to clients in an economical and efficient manner; and
- measure and report on the effectiveness of the programs in meeting their objectives.

Our audit focused on the major program offerings within the Employment and Training and Apprenticeship categories, as these two areas combined accounted for about 90% of all transfer payments. We looked at information available for the Ministry's overall planning of employment and training services and the methods used by the Ministry to evaluate program achievements.

Audit work was primarily conducted at the Ministry's corporate office, two of its four regional offices, and six local field offices in those regions. In 2014/15, the two regional offices selected for detailed audit work (Central and Western regions) collectively served 78% of employment service clients and 74% of active apprentices. These regions also accounted for 72% of transfer payments for employment services and 60% of transfer payments for apprenticeship training. We also completed work at six local Ministry field offices in the regions selected and visited three third-party service providers in these regions to gain an understanding of how employment services were being delivered.

In conducting our audit we reviewed relevant documents, analyzed data and information, interviewed appropriate Ministry and service provider staff and reviewed key studies and relevant research from Ontario and other jurisdictions.

For each of the programs focused on, we obtained, reviewed and analyzed information specific to those areas. For the Employment and Training programs we examined the Ministry's use of labour market and location indicators and its processes for assessing the service providers' ability to deliver employment services, monitoring service providers' performance and managing contracts. For the Apprenticeship programs we examined completion rates by trade and sector, pass rates for in-class training and qualification exams, results of surveys conducted with apprentices and employers, funding provided, steps being taken by the Ministry to improve outcomes, and best practices in other jurisdictions. We also met with the CEO of the Ontario College of Trades to discuss its function and mandate.

We reviewed key studies, including the *Employment and Training Services Review*, September 2013, done by the Social Research and Demonstration Corporation, which made recommendations to improve employment and training programming; *Apprenticeship in Ontario: An Exploratory Analysis*, January 2015, done by the Higher Education Quality Council of Ontario, which gives an overview of the apprenticeship system and identifies areas of strengths and weakness; and the report released by the Premier's Highly Skilled Workforce Expert Panel in June 2016, entitled *Building the*

Workforce of Tomorrow. The panel, which included university professors, public policy advisers and executives of corporations, made recommendations to strengthen Ontario's workforce to meet the demands of a technology-driven economy.

4.0 Detailed Audit Observations

4.1 Majority of Employment and Training Program Clients Unsuccessful in Finding Full-Time Employment in Their Chosen Career

Based on Ministry data, employment and training programs and services resulted in relatively few people finding full-time employment, or employment in their field of training.

Based on our calculations, in 2015/16, only 38% of **Employment Service program** participants were employed full-time, and only 14% had found employment in their field of training, found a more suitable job than before the program, or were employed in a professional occupation or trade at the time of program completion.

The Ministry's target for Employment Service is that at least 69% of clients are employed (including self-employed) or on a career path, and an additional 10% of clients are in an education or training course at program completion. The Ministry met its target in 2015/16, as 68% of individuals reported being employed or on a career path as a result of the program, and 13% reported being in an education or training program.

Outcomes for 2014/15 were similar, but when service providers followed up with participants three to 12 months after they had received employment services, the percentage employed or on a career path had dropped to 52%. However, service providers were not able to contact 28% of participants by the end of the 12-month follow-up period.

However, numerous categories were used to indicate participants' employment status at various points after receiving employment services. We noted that these categories were not mutually exclusive, yet the Ministry assigned participants to only one. For instance, someone categorized as "employed in a profession/trade" could also have been "employed full-time" or "employed part-time." Therefore, results in any of the categories could be understated and not provide the Ministry with an accurate picture of how well its programs are performing.

We noted similar results with the **Second Career program**—intended to retrain unemployed and laid-off workers in order to find employment in high-demand occupations. The Ministry has not established targets for these measures, but given that people are getting trained in high-demand occupations, one would expect that a high percentage would find employment. Of those who completed the training in 2015/16, only 35% of participants reported being employed at the time of completion (17% employed full-time), and only 10% reported being employed in their field of training. Outcomes for 2014/15 were similar, but when service providers followed up with these participants 12 months after they completed the program, employment results had improved. That is, 81% of contacted participants reported being employed, 44% reported being employed full-time, and 22% reported being employed in a field relevant to their training. For this program, the Ministry was able to contact two-thirds of participants for the 12-month follow-up.

The Ministry's **Targeted Initiative for Older Workers**—intended to help unemployed older workers in vulnerable communities increase their employability—has set a target of 84% of participants completing the program and 50% to be employed at time of exit and three months after finishing the program. In 2015/16, 75% of participants completed the program. Of those, 69% were employed at time of program completion and 63% of participants were employed three months after

they exited the program. However, in the prior two fiscal years the employment targets at three months after completing the program were not met. For fiscal 2014/15, 69% of those that completed the program were employed at time of program completion, but only 40% were employed three months after they exited the program. For fiscal 2013/14, 59% of those that completed the program were employed at time of program completion, but only 43% were employed three months after they exited the program.

Outcome measures for the **Canada-Ontario Job Grant**—funding for employer-led training for upgrading of skills specific to their business—are based on surveys of grant recipients. In 2015/16 the results showed:

- the percentage of employers who considered the training to have had a positive impact (98%), improved job performance (88%) and employee retention (95%); and
- the percentage of employees/trainees satisfied with training quality (92%), percentage where credentials were obtained through the training (68%), and percentage who felt training increased job quality (32%).

At the time of our audit, we noted that the Ministry had not established internal outcome measures for the remaining two employment and training programs—Ontario Job Creation Partnership and Ontario Employment Assistance programs. Further, the Ministry followed up with only a small portion of Employment and Training Program participants at three, six and 12 months after program completion, which does not allow for an adequate assessment of the long-term impact of the programs.

RECOMMENDATION 1

In order to improve the effectiveness of employment and training programs, the Ministry of Advanced Education and Skills Development should:

- establish outcome measures and associated targets for the two programs that do not have measures—Ontario Job Creation Partnership and Ontario Employment Assistance programs;
- review instances where program outcomes do not meet targets and take corrective actions;
- revise employment status categories to enable more useful outcome information; and
- develop strategies that would enable follow-up with more participants at three, six and 12 months after receiving services from all programs.

MINISTRY RESPONSE

The Ministry agrees with the Auditor's recommendation, and will develop and implement new outcome measures for the Ontario Employment Assistance Services and the Ontario Job Creation Partnership.

The Ministry will also regularly review outcomes against targets and take corrective action where necessary. This should help ensure services meet client needs and are delivered effectively and efficiently.

As part of the review of the Performance Management Framework for Employment Services, the Ministry will enhance our system to enable follow-up with more participants, so we can more effectively measure, analyze and improve client outcomes. The changes we are exploring include:

- improving consistency of follow-up requirements across employment and training programs;
- examining roles, responsibilities and accountabilities with respect to participant follow-up; and
- establishing consistent and common definitions for employment status categories across all programs.

4.2 Funding for Employment Service May Not Reflect Current Need

As discussed in **Section 2.4.1**, funding for each third-party service provider of Employment Service is determined by taking into consideration the targeted number of clients to be served, as well as labour market and location indicators.

In 2015/16, the average funding per site per client served (excluding those doing independent research and job searching) was $1,828 and ranged from $387 to $5,162. Client costs per site were highest in the Northern region and relatively similar in the other three regions.

We had the following concerns with the inputs used to determine funding for Employment Service:

- In general, Employment Service sites that exceed the average for each labour market and location indicators currently used in the funding model receive more funding in relation to other sites. However, the Ministry has not updated the averages of these indicators since 2009/10. As such, they may not reflect the current relative employment, demographic and cost conditions in place at a service provider's site, so sites may not be receiving the correct proportion of overall funding.
- The targeted number of clients to be served by each service provider has remained relatively constant for at least the past three years, even though some service providers are consistently serving fewer clients than planned for in their service contracts. For example, service providers for 40 of 322 sites missed their intake targets by at least 10% in both 2014/15 and 2015/16, but only four sites had their targets, and therefore funding, reduced for 2016/17. We would expect that funding would be adjusted in future years for service providers that consistently miss their intake targets.

RECOMMENDATION 2

To ensure funding is properly allocated to service providers of Employment Service, the Ministry of Advanced Education and Skills Development should:

- periodically update information related to the labour market and location indicators used in the funding model to ensure they reflect current employment, demographic and cost conditions in communities across the province; and
- ensure that the targeted number of clients to be served by each service provider, and the associated funding, are adjusted to reflect the actual level of services being provided.

MINISTRY RESPONSE

The Ministry agrees with this recommendation. Using new census data expected in November 2017, the Ministry will incorporate updated labour market information into the calculation of Employment Service funding. In addition, Ontario's Highly Skilled Workforce Strategy includes the development of more local, relevant and timely labour market data. The Ministry will explore information-sharing with the federal government to support access to more timely information.

Recent improvements in our business planning process, including a tool that outlines the current process and calculation for service provider intake targets, was released for business planning in October 2016 for contracts effective April 2017. It will ensure that a consistent approach for intake targets is applied throughout the province.

In addition, staff will now be available to provide guidance and support to local offices in the application of the process and tool. This is expected to support a responsive approach to adjusting service provider targets and the associated funding for contracts.

4.3 Significant Overpayments to Second Career Clients Not Recovered

Second career clients may receive funding in equal instalments every two weeks over the term of their agreement or a lump sum depending on the type of expense being covered. Clients are required to submit receipts throughout the funding period, but only after funding is received. In most cases, clients must repay the Ministry if they don't provide receipts of approved expenses, no longer regularly attend their education program, receive a refund from the training institution they registered with, or receive funds they are not entitled to. Any amount not paid back by the time the client's file is closed is forwarded for collection to Ontario Shared Services at the Ministry of Government and Consumer Services. Amounts Ontario Shared Services is not able to collect are written off after two years.

In the last three fiscal years (2013/14–2015/16), $30.1 million in overpayments was forwarded for collection to Ontario Shared Services. This represents 6% of total program funding for that period. During the same period, Ontario Shared Services wrote off $ $26.6 million in overpayments to Second Career clients.

Given the sizable amount of overpayments and amounts written off, the Ministry could prevent or minimize future losses by flowing only a portion of the approved funding in advance of receipts (for example, the first one or two months in the program, to provide clients with an initial cash flow), and basing all future payments on receipts submitted by clients.

RECOMMENDATION 3

In order to minimize the amount of unrecovered overpayments to Second Career clients, the Ministry of Advanced Education and Skills Development should evaluate the benefits of providing funding to clients in advance of getting receipts only for the initial instalments (of one or two months), and requiring receipts prior to providing funds for remaining instalments.

MINISTRY RESPONSE

The Ministry acknowledges that overpayments to Second Career clients has been an issue and has been working to minimize them. In April 2016, the Ministry made a number of changes to information systems and business processes, such as more frequent reconciliation of receipts (quarterly instead of at the end of the contract).

The Ministry will review the impact of these changes and consider additional improvements, should they be required, in the spring of 2017.

4.4 Ministry Follow-Up on Action Required by Service Providers Not Adequate

Our assessment of the Ministry's primary activities used to determine the appropriate level of Ministry oversight of Employment Service providers—completion of risk assessments of service providers' operations, site compliance visits and review of key performance indicators—as described in **Section 2.5**, highlighted the following deficiencies.

4.4.1 No Follow-Up Conducted on Medium-Risk Service Providers as Required

The Ministry did conduct the required risk assessment of all service providers within the last two years and rated 97% of service providers as low risk and the remaining 3% as medium risk.

We reviewed the Ministry's follow-up activities for all service providers rated as medium risk in their last risk assessment, which was the lowest rating received. Although the Ministry is required to follow up on deficiencies on an annual basis, we found that none of those rated as medium risk in 2014/15 had a follow-up assessment completed in 2015/16 as required. Furthermore, for those service providers assessed as medium risk in their last two assessments, many of the same deficiencies were noted in both assessments.

Figure 6: Service Quality Scores and Monitoring Performed by Ministry for Employment Service Sites
Prepared by the Office of the Auditor General of Ontario

	2013/14	2014/15	2015/16
Minimum Provincial Service Quality Score	5.14	5.25	5.25
% of sites below site-specific targeted score[1]	16% (53/324)	10% (34/323)	16% (50/322)
% of sites below site-specific targeted score, but above minimum Provincial service quality standard	14% (47/324)	10% (33/323)	13% (42/322)
% of sites below minimum Provincial service quality standard	2% (6/324)	0.3% (1/323)	3% (8/322)
% of sites placed on Directed Improvement for missing minimum standard	n/a[2]	0.3% (1/323)	2% (7/322)
% of sites placed on Official Review for missing targeted score	n/a[2]	0% (0/323)	1% (4/322)

1. A service quality target is established for each site as a component of the service provider's contract with the Ministry.
2. The Ministry did not have a formal centralized tracking process for the Directed Improvement or Official Review process for 2013/14.

4.4.2 Ministry Not Following Up on Many Deficiencies Found during Compliance Visits

Based on a sample of site compliance files we reviewed, we noted that 68% of the site visits had instances of non-compliance with their contract or with Ministry guidelines identified by the Ministry's employment training consultants. These deficiencies required follow-up actions, but only one-third of the sites had submitted action plans to the Ministry indicating how they would be addressed. There was no evidence on file that the Ministry had followed up with the other two-thirds of sites with deficiencies.

Common deficiencies resulting from site visits included inconsistencies between information in the service providers' files and what they entered into the Ministry's system; poor documentation practices (such as no documented justification for client referrals to other services, and incomplete or illegible case notes); and follow-ups with clients not being done at three, six and 12 months after they completed their service, as required by the service provider guidelines. We noted that the Ministry had not analyzed common deficiencies in order to address them system-wide.

4.4.3 Ministry Policy Related to Monitoring of Underperforming Service Providers Not Always Followed

For the last two fiscal years, almost all sites that failed to meet the minimum Provincial service quality standard were put on the directed improvement process, as shown in **Figure 6**. However, almost none of the sites that met the minimum Provincial standard but failed to meet their service quality target agreed to with the Ministry in either of the last two years were put on official review. As a result, we noted that without enhanced monitoring efforts, seven sites failed to provide the quality of service they had agreed to under their contracts for the last three consecutive years.

RECOMMENDATION 4

To ensure Ontarians seeking employment and training services receive quality service, the Ministry of Advanced Education and Skills Development should:

- employ enhanced monitoring efforts in place for all sites that fail to meet either the minimum Provincial quality standard or their targeted service quality scores; and
- ensure corrective action is taken within the timelines established.

MINISTRY RESPONSE

The Ministry agrees with the recommendation. The Ministry will ensure enhanced monitoring is used for all underperforming service providers through processes such as Directed Improvement and Official Review.

We will implement enhancements to more closely track and monitor service providers' progress on improvement plans, and explore the development of new activity reports. Additionally, the Ministry will implement a staff training strategy to ensure appropriate and consistent application of our monitoring framework.

We will review our existing framework, tools and resources to ensure staff are actively monitoring service provider improvement plans, and that corrective actions are being taken within established timelines.

RECOMMENDATION 5

The Ministry of Advanced Education and Skills Development should identify common deficiencies among service providers during its various monitoring activities and address these system-wide.

MINISTRY RESPONSE

The Ministry agrees with this recommendation. The Ministry is exploring options to create and implement a solution to track the results of service provider monitoring activities in order to identify and analyze provincial trends.

As a first step, the Ministry will dedicate resources to identify and analyze trends and gaps. This work will inform the development of provincial strategies to address any network-wide issues.

4.5 Improvement Needed to System Evaluating Service Providers

4.5.1 Long-Term Outcomes for People That Accessed Employment Service Do Not Impact the Effectiveness Rating in the Performance Management System

Effectiveness indicators, used to measure the impact or outcome of the services provided, are based on the client's employment or training status only at the time they exit the program. Ministry guidelines require service providers to follow up with clients at three months after they have exited the program to determine their employment status. If there is not yet a positive result for the client, another follow-up is required at six months and yet another at 12 months if there is no positive result. Often these later outcomes differ significantly from initial outcomes, as already discussed in **Section 4.1**.

4.5.2 Targets Are Too Low for Efficiency Measure

For both of the efficiency indicators (that is, the number of clients to be served and the number of information sessions or workshops to be held), targets set by the Ministry with service providers are too easily achievable (see **Figure 3**). This is evidenced by the fact that in 2015/16, sites met 95% of their targets (on average) for the number of clients they were to assist, with half of the sites achieving 100% or more of their targets. As well, the average percentage achieved by sites for information sessions and workshops held was 151%, with 90% of sites achieving 100% of their targets or greater.

RECOMMENDATION 6

To properly evaluate the service providers' performance, the Ministry of Advanced Education and Skills Development should:

- incorporate longer-term outcomes of clients' employment or training status into the

measure of service provider effectiveness to provide a better indicator of whether programming is resulting in sustainable employment; and
- set meaningful performance management targets for the efficiency indicators.

MINISTRY RESPONSE

The Ministry agrees with this recommendation. As part of its broader work to transform employment and training services, the Ministry will review and make changes to how performance is measured and managed in its programs, with a focus on tracking and improving long-term, sustainable employment outcomes. Changes may include:
- improved methods of data collection to determine the long-term employment, training and education outcomes of participants;
- integration of long-term outcomes data into service quality standards for Employment Ontario delivery providers; and
- updating efficiency targets.

4.6 Less Than Half of Those Who Begin an Apprenticeship Program in Ontario Complete It

According to the Ministry's 2015 Apprenticeship Survey, 70% of those who completed their apprenticeship program were employed in their trade. However, as shown in **Figure 7**, the average completion rate for apprentices in Ontario for the five-year period from 2011/12 to 2015/16 is only 46% for a Certificate of Apprenticeship and 47% for a Certificate of Qualification. The construction sector had the highest average completion rates for both types of certificates, while the service and industrial sectors had the lowest average completion rates for Certificates of Apprenticeship and Certificates of Qualification, respectively.

For the 20 trades in highest demand by apprentices, those with the highest completion rates in 2015/16 were power line technicians (75%), and hairstylists, electricians and plumbers (at almost 70%). All but one of these are compulsory trades. The trades with the lowest completion rates were IT customer service agents (4%), cooks (27%), industrial electricians (29%) and auto body and collision repairers (30%). Except for the last trade, these were voluntary trades.

Completion rates were substantially higher for those training for a compulsory trade than for a voluntary trade, an average of 59% vs. 35%, respectively. This is understandable, as certification is required to work in a compulsory trade, but not in a voluntary trade. Nevertheless, the Ministry provides the same amount of funding for skilled trades requiring the same levels of training, regardless of whether it is a compulsory or voluntary trade. The amount spent by the Ministry on apprentices who did not complete their program is not known because the Ministry does not track funding by apprentice.

RECOMMENDATION 7

In order to maximize the benefit of Apprenticeship Program funding, the Ministry of Advanced Education and Skills Development should seek ways to increase the completion rate of apprentices by:
- developing and implementing strategies to improve completion rates for apprentices in both compulsory and voluntary trades; and
- evaluating whether it should change the degree of funding it provides for apprenticeship training in voluntary trades as compared to compulsory trades.

MINISTRY RESPONSE

The Ministry agrees with this recommendation. As part of the government's Highly Skilled Workforce Strategy, the Ministry is leading work to modernize the apprenticeship system and increase completion rates and the participation of traditionally under-represented groups, while creating clearer, better pathways for learners.

Figure 7: Apprenticeship Completion Rates, 2011/12–2015/16[1]

Source of data: Ministry of Advanced Education and Skills Development

	2011/12 (%)	2012/13 (%)	2013/14 (%)	2014/15 (%)	2015/16 (%)	Average (%)
Completion of a Certificate of Apprenticeship	**47**	**47**	**48**	**41**	**45**	**46**
By Sector:						
Construction Sector	44	46	53	56	56	51
Industrial Sector	51	45	42	41	41	44
Motive Power Sector	48	46	46	45	47	46
Services Sector	48	49	45	24[2]	33	40
By Type:						
Compulsory Trades	57	57	60	60	60	59
Voluntary Trades	37	35	38	27	35	34
Completion of a Certificate of Qualification	**46**	**47**	**46**	**46**	**48**	**47**
By Sector:						
Construction Sector	49	50	52	55	54	52
Industrial Sector	44	43	36	35	33	38
Motive Power Sector	48	47	48	45	47	47
Services Sector	44	46	42	45	46	45
By Type:						
Compulsory Trades	57	58	59	60	60	59
Voluntary Trades	34	35	33	35	36	35

1. Completion rates calculated by the Ministry using an eight-year cohort.
2. This drop is mostly due to an influx of registrations in IT Call Centre Trades in 2006/07 followed by the majority of these clients cancelling their apprenticeships.

Completions are, and will remain, a key focus for the Ministry. In addition to strategies already implemented, such as examination preparation courses, financial incentives for progress and completion, and a strategy for monitoring apprentices who are at risk of not completing their training, the Ministry is also piloting initiatives to help apprentices improve their literacy and numeracy skills and to connect unemployed apprentices with Employment Ontario service providers.

The high level of participation of employers and apprentices in voluntary trades training indicates their support for formal training, skills recognition and labour mobility. In light of the auditor's recommendations, the Ministry will consider evaluating whether changes to the degree of funding for voluntary trades could lead to better completion rates.

4.6.1 Difficult to Compare Apprenticeship Completion Rates across Canadian Jurisdictions

The Ministry measures completion rates for apprenticeships by tracking a cohort of individuals eight years from the time of their initial registration. Since the typical length of an apprenticeship program is four years, this allows for an extra four years past the standard apprenticeship program length to complete the program.

Although the method for calculating completion rates for apprentices in Ontario is similar to the method used by colleges to measure completion for students in other certificate or diploma programs they offer, it is not comparable to how completion rates for apprentices are measured in other jurisdictions. In fact, we noted that there is no standard

method used across all provinces for calculating completion rates for apprentices. This makes it difficult to compare how well one province is performing relative to another in order to learn and share best practices that produce better outcomes.

The Canadian Apprenticeship Forum (a non-profit organization that conducts research and share best practices in the area of apprenticeships) also noted a lack of consensus on the methodology used in Canada to calculate completion rates across apprenticeship programs. And in April 2014 it calculated completion rates for 2011 using a proxy cohort method for all provinces and territories that links completion in a given year to registrants in several previous years. Using this method, Ontario had the third lowest completion rate at 42%.

RECOMMENDATION 8

In order to assess how effective its apprenticeship program is in comparison with similar programs in other Canadian jurisdictions, the Ministry of Advanced Education and Skills Development should take a leadership role and, in conjunction with other provinces, develop a standard methodology for calculating apprenticeship completion rates across Canada.

MINISTRY RESPONSE

The Ministry welcomes this recommendation. Ontario, as well as most jurisdictions in Canada, was supportive of the work being carried out by the Canadian Council of Directors of Apprenticeship (Council) to develop a consistent methodology for apprenticeship systems across Canada to calculate completion rates. However, the Council has paused their work on this until after the Registered Apprenticeship Information System Concept Review is completed.

The Council's Research Committee, Statistics Canada and Employment and Social Development Canada are collaborating on a two-year project to review and ensure greater consistency and reliability of apprenticeship data used in the Registered Apprenticeship Information System. Once the system data has been reviewed for quality, it will inform actions for work on a common completion rate methodology. Ontario will endeavour to take a leadership role if this work resumes.

4.6.2 Ministry Surveys Do Not Obtain Adequate Information on Why Apprentices Do Not Complete Programs

The Ministry's annual Apprenticeship Survey of people who have either completed their apprenticeship or withdrawn from the program does not adequately identify the cause of an apprentice not completing the program, even though this is part of the survey's objective. According to the latest survey in 2015, the most common reasons given for withdrawing from the program included the apprentice quitting his/her job (14%); changing trades or career (10%); or being laid off by an employer (8%). These answers do not provide insight into why apprentices decided to quit their job or change careers, and therefore do not provide enough information for the Ministry to address these reasons for withdrawal.

More information on challenges to apprenticeship completion was included in a 2015 study completed by the local planning board of South Central Ontario, a community-based group funded by the Ministry to assess local labour market conditions and work with community stakeholders to address local labour market issues. The board, composed of academics and other experts, identified significant barriers to completing apprenticeships in their community that included:

- financial insecurity and expenses, such as not receiving pay raises, long waiting periods for Employment Insurance, and other financial difficulties;
- workplace training issues including the employer's lack of willingness to train, challenges meeting training requirements on time

and difficulty assessing the progression or competencies attained through training;
- employer commitment and workplace limitations, such as employers unwilling or unable to provide steady work for the length of the program or job functions to complete all competencies; time off for apprentices to attend classes or complete required paperwork; and
- instructional methods, curriculum and assessment leading apprentices to fail trade qualification exams, or in-class training and schools not teaching the latest industry technologies.

Another study by the Higher Education Quality Council of Ontario noted additional barriers in its January 2015 report, *Apprenticeship in Ontario: An Exploratory Analysis*. In particular, apprentices who complete their apprenticeship and gain journeyperson status may risk losing their jobs if their employers can no longer afford their services. The report further notes that there may be more jobs for senior apprentices than junior journeypersons. For these reasons, apprentices may choose not to complete their apprenticeships.

Additional barriers to completion were identified by the Ministry during its exercise to identify apprentices at risk of non-completion. These are described in **Section 4.9**. At the time of our audit, the Ministry had not developed any strategies to help address barriers identified either through this exercise or the studies noted above.

RECOMMENDATION 9

In order to gain a further understanding of the challenges preventing apprentices from completing their training, the Ministry of Advanced Education and Skills Development should:
- develop methods to gain more insight into the factors causing apprentices to withdraw from the program; and
- where feasible, develop strategies to address these factors.

MINISTRY RESPONSE

The Ministry agrees with this recommendation. The Ministry will revise the annual Apprenticeship Survey to ensure it includes mandatory questions on why apprentices withdraw from their program. In addition, as previously indicated in response to Recommendation 7, the Ministry has introduced a number of completion initiatives. As well, other analytical work to support the identification of barriers to completion is discussed further in Recommendation 13.

4.7 Financial Incentives Offered to Employers Do Not Encourage Apprenticeship Completions

As described in **Section 2.4.2**, there are numerous Provincial incentives available to employers to hire and train apprentices, including the Apprenticeship Training Tax Credit, a signing bonus and a completion bonus. We noted that these incentives are not aligned with the goal of improving apprenticeship completion rates.

4.7.1 Apprenticeship Training Tax Credit Being Redesigned to Improve Completion Rates

The Apprenticeship Training Tax Credit is not tied to apprenticeship completion. In June 2015 the Ministry of Advanced Education and Skills Development, in conjunction with the Ministry of Finance, convened a working group to determine how the Apprenticeship Training Tax Credit could be redesigned to improve completion rates and increase access to under-represented groups (such as Indigenous people, recent immigrants and women). At the time of our audit, the working group was considering options.

4.7.2 Bonuses to Employers Not Aligned with the Goal of the Apprenticeship Program

The goal of the apprenticeship program is to ensure workers become certified and employed in a skilled trade. The purpose of the signing bonus is to increase the number of registered apprentices, and the purpose of the completion bonus is to encourage training completion and certification. Although the completion bonus is more closely aligned with the Ministry's goal of increasing the number of apprentices that become certified, it is half the amount of the signing bonus. According to a one-time survey of employers commissioned by the Ministry in 2014, only 19% of respondents indicated that they were aware of the completion bonus to employers.

RECOMMENDATION 10

The Ministry of Advanced Education and Skills Development should complete their review of apprenticeship program financial incentives to employers and redesign the incentives to ensure that they encourage both program registration and completion, with an emphasis on the latter.

MINISTRY RESPONSE

The Ministry agrees with this recommendation. The Ministry is committed to the continuation of employer support for apprenticeship training to improve completion rates and make apprenticeship training accessible to under-represented groups.

The Ministry continues to work with the Ministry of Finance to review the Apprenticeship Training Tax Credit. As part of this process, the Ministry recently undertook an employer engagement process focused on financial supports in the apprenticeship system.

4.8 Examination Preparation Initiative Should Be Expanded

One initiative that has shown positive results is the Ministry's funding of examination preparation courses to prepare apprentices for their final certification exam. When the initiative began in 2010/11, the 30-hour course was offered to apprentices in six high-demand skilled trades (electrician, automotive service technician, general carpenter, plumber, truck and coach technician, and sheet metal worker) following their final level of in-class training and within 90 days of preparing to write their certification exam. There is no cost to the apprentice to attend, other than time off from work (usually without pay, although they may be eligible for Employment Insurance during in-class training).

We compared the pass rates from 2010/11 to 2014/15 for those who had and those who had not taken the exam prep course, and found that for each year in each of the six trades, the pass rate was higher for those that had taken the exam prep course than for those that had not. For the five-year period, the average exam pass rate for all six trades combined was 12 percentage points higher for those who had taken the course (56% vs. 44%). In addition, according to the Ministry's 2015 survey, 79% of those that took the exam prep course and passed a trade certification exam said they found it helpful. Apprentices who were unsuccessful were not asked about their satisfaction with the exam prep course.

As of April 1, 2016, the Ministry made it mandatory for all training delivery agents to offer exam prep courses for 11 high-demand trades (the six mentioned before plus five additional ones). However, despite its proven success, the course is not mandatory for those apprentices who have previously attempted the exam but were unsuccessful.

In comparison to Ontario, other provinces examined in our review did not offer similar exam preparation courses targeted directly to those recently finishing the in-class portion of their apprenticeship. However, other provinces did offer exam

supports that could be considered by Ontario; for example, British Columbia offered course refresher training for those working in a trade and wishing to challenge a certification exam or for existing apprentices in need of skills updating.

From its inception in 2010/11 to 2014/15, the Ministry paid $6.6 million to training delivery agents to offer exam prep courses to 16,206 apprentices. However, we noted that the hourly cost per person is higher than what the Ministry typically pays training delivery agents for regular in-class training courses. For the time period specified, the hourly cost per apprentice for exam prep courses was on average $13.59, compared to $ 9.56 (that is, a daily rate of $57.35 for six hours of training) for in-class training. We calculated that the Ministry could have saved almost $2 million had it used the same rate it paid for in-class training. The Ministry informed us that for exam prep courses, it has chosen to cover the apprentices' portion of the classroom fee; however, this would only account for half of the difference.

RECOMMENDATION 11

To increase the successful completion of apprenticeship training in a cost-effective way, the Ministry of Advanced Education and Skills Development should:

- evaluate the outcome of expanding the examination preparation course to more high-demand trades and, if positive results are found, further expand it to other compulsory trades;
- consider making the course mandatory for apprentices who have previously failed their trade certificate exam; and
- review and adjust funding for exam preparation courses to ensure it is comparable to rates paid to training delivery agents for regular in-class training courses.

MINISTRY RESPONSE

The Ministry shares the Auditor's concerns about apprentices who do not pass their apprenticeship training and certification exam, and is committed to increasing the rate of successful completion of apprenticeship training. In line with this commitment, we have increased the number of examination preparation courses offered every year since inception and will continue to do so.

The Ministry will continue to work with the Ontario College of Trades to connect these candidates with the appropriate examination preparation and courses. The Ministry will also work with the Ontario College of Trades to explore including proof of upgrading as a requirement prior to rewriting the exam.

Previously, as exam preparation was not a regular part of classroom training, the Ministry paid the full daily rate to support participation. On January 1, 2017, the Ministry will introduce examination preparation components into final-level in-class training courses for relevant trades. As exam preparation will now be delivered as a portion of regular in-class training, it will be subject to the same daily rate, with a portion paid by the apprentice.

4.9 Improvement Needed in Identifying and Monitoring Apprentices at Risk of Not Completing Their Apprenticeships

4.9.1 Number of Apprentices at Risk of Non-completion Remains High Even after Implementation of Monitoring Strategy

In October 2013, the Ministry developed the Apprenticeship Monitoring Strategy to identify and follow up on those apprentices considered at high risk of non-completion. The Ministry defines an apprentice who is at risk of not completing their apprenticeship program as:

- a registered apprentice who has not had any schooling activity for at least 12 months from their last in-class training session or date of registration; and/or
- a registered apprentice who is active in the program (has had in-class training within the last year) but has exceeded the standard completion duration of the trade's program by at least 12 months.

The Ministry first identified at-risk apprentices in November 2014. At that time, using the parameters noted above, the Ministry ran a system report identifying 16,350 at-risk clients. The Ministry's regional office staff then began following up with the identified clients or their employers to determine the cause and take appropriate action. By March 2016, regional office staff were able to contact 88% of these apprentices.

The most common barriers to completion noted by those contacted were that the relationship between the apprentice and the employer had ended (the apprentice had been laid off or left the trade on their own); the apprentice required more information about completion requirements and process (such as skills needed to be met); and the employer was not encouraging completion (such as not providing opportunity to learn the necessary skills, or not allowing the apprentice time off to attend in-class training). Ministry interventions typically included providing information about completion requirements and process, schooling options, financial supports and incentives available; reminding employers of their obligations under the training agreement; and making referrals for foundation skills training and employment services.

About 68% of cases were resolved by having the apprentice exit the system, in effect cleaning out the Ministry's database (38% of apprentices had their training agreement cancelled or suspended; 20% were issued a certificate of apprenticeship because they had achieved the requirements but were unaware they were finished; and 10% were no longer considered at risk because they had either completed a level of in-class training, were enrolled in a training session or were confirmed to attend an upcoming training session). The remaining 32% continued to be at-risk and required further monitoring and intervention.

Following this exercise on the original 16,350 apprentices identified in November 2014, which has been ongoing for at least 1.5 years, about 6,400 apprentices were still at risk as at March 2016.

In December 2015, the Ministry expanded the definition of at-risk apprentices to include:

- apprentices who had not indicated schooling preferences; and
- apprentices without a registered training agreement.

The Ministry began implementing this definition in May 2016. As of June 30, 2016, under the expanded definition, a total of 39,000 apprentices were considered at risk for monitoring purposes. Of these, 20,800 were apprentices identified under the original definition, and an additional 18,200 apprentices were captured under the expanded definition. In our view, the expanded definition better identifies apprentices who may require assistance to progress through their apprenticeship. Regardless of the definition used, the number of at-risk apprentices has increased during the last 1.5 years since the monitoring strategy was introduced.

The Ministry believes that point-in-time figures do not capture the full measure of success of its monitoring strategy. The Ministry also looks at other measures of success, including the number of at-risk apprentices who have since been issued a certificate of apprenticeship or who have been enrolled or have completed a level of in-school training.

About 230 employment training consultants, working in the Ministry's local offices, are responsible for registering new apprentices and scheduling them for in-class training sessions, and for ongoing periodic identification and monitoring of at-risk apprentices. At the time our audit began, these staff members had to run reports to identify at-risk individuals manually because the Ministry's IT system did not automatically flag or generate alerts to indicate individuals at risk of non-completion.

In addition, the system did not generate automatic notices that could be mailed directly to apprentices and their employers unless triggered manually by an employment training consultant. In the summer of 2016, the Ministry's IT system began to automatically flag at-risk apprentices for Ministry staff and generate automatic notices for mailing to apprentices and employers. The Ministry's information system allows employment training consultants to make notes in the apprentice's electronic case file. We would expect that files for individuals considered at risk would contain information identifying barriers to completion and follow-up action taken to remedy the lack of progress. However, only 30% of the electronic case files for the 15,700 active apprentices identified to be at risk in May 2016 contained review notes that described the issues or challenges preventing completion. Further, only 23% of files in which the apprenticeship training agreement had been cancelled or suspended during the last five fiscal years (2011/12–2015/16) contained notes. A description of the issues leading to cancellation or suspension would be useful to the Ministry in determining if there is a reason preventing completion that can be resolved. The Ministry could also use this information if there are employer-specific issues, or common issues that could be addressed through corporate policy or communication. But consistency in the reasons identified and consistency in use of the system function for documenting case notes would be necessary to draw meaningful analysis from such information.

Apprentices are assigned to an individual employment training consultant for assistance and monitoring. As of June 2016, based on information in the Ministry's system, we noted that almost 1,000 active apprentices were assigned to three employment training consultants who had not been working for the Ministry for approximately one year. An additional 1,700 active apprentices were assigned to four employment training consultants who were currently on leave for an extended period of time, with the longest on leave since July 2015 with no expected return date.

RECOMMENDATION 12

To improve the success rate of apprentices considered at risk of not completing their program, the Ministry of Advanced Education and Skills Development should:

- identify key reasons individuals fail to progress through their apprenticeships and apply intervention techniques system-wide;
- include notes to files of apprentices identified as at risk of not completing that can be used for following up with apprentices, as well as analysis of common issues; and
- immediately reassign apprentices to an active employment training consultant where an apprentice's employment training consultant no longer works for the Ministry or goes on leave for an extended period of time.

MINISTRY RESPONSE

The Ministry will continue to refine the risk indicators to focus ministry resources on those apprentices who are most in need of support to complete their program. Helping apprentices successfully complete their apprenticeship is and will remain a key focus for the Ministry.

Through the apprenticeship monitoring strategy, the Ministry will continue to identify key reasons for an apprentice's failure to progress and will introduce more interventions to facilitate apprenticeship completion. We will continue to find ways to use technology more effectively to contact all apprentices about progress and completion. Going forward, the Ministry will consider the development of a scorecard with indicators on the status of at-risk apprentices. In December 2015, the Ministry improved its database so staff can better record the results of their monitoring activities with at-risk apprentices. The Ministry will require staff to use the system to document barriers to completion and the actions they have taken for each at-risk apprentice. We will analyze more

data as it becomes available to identify effective interventions. Also, as noted in response to Recommendation 9, the Ministry will revise the annual Apprenticeship Survey to include mandatory questions on why apprentices withdraw from their program. This work will help to further inform the Ministry's monitoring strategy, as well as other completion interventions.

As for the reassignment of apprentices to active employment and training consultants, the issue identified has already been addressed and the Ministry is satisfied that no caseloads were lost or misdirected and no clients were affected as a result of this issue. Moving forward, we are tracking caseloads on a monthly basis to ensure all apprentices are assigned to active staff and updates are entered into the system in a timely manner.

4.10 Limited Monitoring of Quality of Apprenticeship Programs

4.10.1 Limited Monitoring of on-the-Job Training

We reviewed a sample of training agreement files and found that, in all cases, the Ministry ensured at the time of registration that the employer was within the correct journeyperson-to-apprentice ratio.

However, the Ministry has not developed specific policies or guidelines for ongoing monitoring of on-the-job training. The regional offices we visited confirmed that their involvement with employers is very limited and noted that employers were visited primarily when there were complaints. From 2013/14 to 2015/16, there were seven complaints made against employers to the regional offices we visited, but none of them were visited by regional office staff. Furthermore, the regional offices did not know if the College had investigated these employers.

Since its creation in 2013, the College has been responsible for enforcement activities such as ensuring journeyperson-to-apprenticeship ratios are met. However, the Ministry does not receive information on the nature and results of enforcement activity conducted by the College. Additionally, the College's annual report does not publish the number of inspections completed of employers who are training apprentices. The Ministry relies on employers to self-report, to both the Ministry and the College, any changes that may affect their ability to provide training for their apprentices. This includes a change or departure of trainers, change in the ratio of journeyperson to apprentice, changes to equipment necessary for training, or the departure of an apprentice.

We obtained apprenticeship completion rates by employer and analyzed them in order to identify employers who may not be adequately preparing their apprentices for success. For employers who have sponsored at least 50 apprentices since the beginning of the program, we identified 171 employers who had less than 20% of their apprentices complete their apprenticeship as of November 2015. Of these, 105 were still actively training almost 4,800 apprentices. We saw no evidence that the Ministry had attempted to complete a similar analysis to identify these employers on its own, and therefore it had not investigated the reasons for the low success rate of these employers.

One risk could be that employers are terminating apprentices once the period for which they can claim an Apprenticeship Training Tax Credit expires and then replacing them with new apprentices. The tax credit is processed by the Canada Revenue Agency. The Ministry has not requested the information regarding those employers who claimed the credit and for which apprentices. As a result, the Ministry has not identified whether certain employers were terminating apprentices once the period for which they could claim the tax credit ended.

4.10.2 Limited Monitoring of In-Class Training

Similarly to on-the-job training, the Ministry generally does not monitor the quality of in-class training.

Figure 8: Pass Rates for Apprenticeship Qualification Exam and In-Class Training, 2011/12–2015/16
Source of data: Ministry of Advanced Education and Skills Development

	2011/12 (%)	2012/13 (%)	2013/14 (%)	2014/15 (%)	2015/16 (%)	Average[1] (%)
Pass Rate for Qualification Exams[2]	**49**	**50**	**52**	**50**	**50**	**50**
Construction Sector	48	48	53	51	54	51
Industrial Sector	46	45	46	49	45	46
Motive Power Sector	51	52	50	48	46	49
Services Sector	54	55	53	53	51	53
Pass Rate for In-Class Training Courses	**93**	**94**	**94**	**94**	**n/a**	**94**
College	93	94	93	93	n/a	93
Non-college	98	97	98	98	n/a	98

1. Averages for Qualification Exams are for the last five years. Averages for in-class training courses are for the last four years, since pass rate data is not available for 2015/16.
2. The passing grade for Qualification Exams is 70%.

The Ministry evaluates whether training delivery agents have the tools and resources to deliver courses when they are initially approved for funding, but any monitoring by the Ministry after that point is complaint driven. This is despite Ministry documentation stating that local Employment Ontario offices across the province are responsible for monitoring the quality and relevance of in-class training on an ongoing basis. Expected monitoring includes:

- ensuring the approved curriculum is used;
- identifying training delivery agents whose classes have an abnormally high course failure rate; and
- working with these training delivery agents to find the causes of high failure rates and develop plans to improve performance.

However, Ministry staff told us that they do not directly assess whether instructors delivering training are qualified and whether courses are taught according to the curriculum, but rely on the internal processes of the training delivery agents. We also confirmed with the College that they do not assess the quality of in-class training.

The Ministry does collect pass rate information by course and training delivery agent, and stated that regional offices only began to consider this information in 2015 to decide how many spaces to fund for each training delivery agent. The Ministry also indicated that much of their interaction with training delivery agents was informal and therefore not available for our review.

We saw a lack of notable improvement in the pass rate for qualification exams over the last five years and a discrepancy in pass rates between in-class testing and qualification exams, as shown in **Figure 8**. Despite this, the Ministry confirmed it has not analyzed this information in order to identify training providers that may not be preparing their students for success and taking the necessary corrective action. We analyzed pass rates for final qualifying exams by training delivery agent over the last five years, and noted that the average pass rate on qualifying exams was at least 10 percentage points higher for apprentices that received in-class training at non-colleges than at colleges.

RECOMMENDATION 13

In order to improve monitoring of on-the-job and in-class training of apprentices, the Ministry of Advanced Education and Skills Development should:

- implement policies and guidelines for ongoing monitoring of on-the-job and in-class training provided to apprentices;

- regularly analyze completion rates by training delivery agent and employer to identify trends that may indicate problems and take corrective action; and
- identify and address issues with in-class training that may be preventing apprentices from passing the final qualification exam.

MINISTRY RESPONSE

The Ministry will work with the Ontario College of Trades to identify any gaps regarding policies and guidelines for ongoing monitoring of on-the-job and in-class training provided to apprentices.

For in-class training, the Ministry will use the key performance indicators developed in 2015/16 but not yet in use (including in-school pass rates, effectiveness of exam prep courses, and seat and funding utilization) to understand performance outcomes, and continue to analyze the results of the annual Student Satisfaction and Engagement Survey of all training delivery agents to identify areas for improvement in instructor quality and the relevance of in-school training. These indicators include graduate employment and graduate satisfaction.

The Ministry agrees that more analysis of completion rates by employer is required, and will support employers who have a large number of apprentices who are not completing their training. The Ministry will build on the monitoring activities introduced in spring 2016—the additional at-risk criteria of apprentices with no registered training agreement, apprentices with no schooling preferences and greater supports for group sponsors with low completion rates.

In addition, the Ministry will be conducting an analysis to determine the correlation between in-class training and the success rate of apprentices on their certification examinations. Once this analysis is complete, the Ministry will work with training delivery agencies and the Ontario College of Trades to address any issues identified in in-school training as having an impact on final qualification examination success rates.

4.10.3 Action Not Taken on Data Collected through Ministry Surveys

The survey of in-class apprentices seems to be of limited value. Although the overall satisfaction rating for the last three years (2013/14–2015/16) has been favourable at 75%, we noted the following limitations:

- Survey questions are not specific to apprenticeship programming, as this survey was developed to obtain feedback on all courses offered by Ontario's colleges of applied arts and technology.
- Colleges were only required to survey 50% of full-time classes prior to 2015/16 (though this changed to 100% of full-time classes plus 50% of part-time classes in 2015/16). Only 16% of apprentices that took in-class training at an Ontario college responded to the survey conducted in 2014/15, the last one for which detailed results were available at the time of our audit.
- There is no detailed analysis of responses by trade for the Ministry to understand if courses in certain trades are presenting challenges and, if so, assess whether the course delivery or instruction method should be adjusted.

The survey of individuals who completed or withdrew from apprenticeship programs provides much more useful information. However, for more than half of the survey questions, the responses from the two groups (those who successfully completed the program and those who did not) are combined. The survey would be more useful to the Ministry if each group's responses were presented separately. For the latest survey in 2015, all individuals who completed or withdrew from their apprenticeship programs were surveyed and 31% responded, of which an equal number had completed or withdrawn from the apprenticeship program. We analyzed the responses for the two groups separately and noted the following:

- Most respondents were satisfied with their training, more so with on-the-job training

than in-class training. For example, 90% of those who completed their apprenticeship and 83% of those who withdrew responded that on-the-job training met their expectations; and 85% of those who completed their apprenticeship and 65% of those who withdrew responded that in-class training met their expectations. Although also favourable, satisfaction with the Ministry was less, as 77% of those who completed their apprenticeship and 67% of those who withdrew responded that the Ministry provided them with enough support to finish their program, although the survey did not specify the types of additional support desired.

- Respondents provided suggestions for improving both the in-class and on-the-job training portions of the program. Suggested improvements for in-class training included better hands-on experience (11%) and having more knowledgeable instructors (8%). Suggested improvements for on-the-job training included more hands-on experience while on the job (7%) and having closer supervision of apprentices (6%). The Ministry has not acted on these suggestions nor shared the results with the College, which is responsible for setting the curriculum.

In spring 2014, the Ministry commissioned a one-time survey of 13,500 apprentice employers to get their perspective on the apprenticeship system. The response rate was 40% (or 5,400). Key responses from employers regarding program quality included:

- 21% of employers were not entirely clear on their roles and responsibilities in training apprentices and felt that clearer and more frequent communication from the Ministry would be better;
- 12% of employers were not satisfied, and an additional 28% only moderately satisfied, with the usefulness of skills and knowledge taught in-class; and
- 36% of employers were only moderately satisfied or not satisfied with accessibility of information provided through the Ministry.

The Ministry informed us that it has not taken any specific actions to address issues raised by the surveys, but would consider their results when redesigning the Apprenticeship Training Tax Credit and programs intended to offer alternative pathways to apprenticeship training.

RECOMMENDATION 14

The Ministry of Advanced Education and Skills Development should administer surveys in a way that allows for detailed analysis of results in order to provide information that can be used to address areas needing improvement. Specifically, the Ministry should:

- develop questions for in-class surveys directly related to apprenticeship training and any other information the Ministry considers necessary to inform future decision-making on program design; and
- analyze survey results by course, trade, training delivery agent, and apprentice completion type (successfully completed vs. withdrawn), as appropriate, for the survey.

MINISTRY RESPONSE

The Ministry agrees with this recommendation and has recently expanded its efforts to improve the applicability of the in-class apprenticeship Student Satisfaction and Engagement survey.

Recently, the Ministry established a dedicated working group with college representatives to address issues raised by the college sector on the in-class survey. A key focus of the working group will be to ensure that the surveys generate data comparable to other college programming, while making the surveys more reflective of apprenticeship in-school training.

The Ministry will expand the nature of questions in other apprenticeship-related surveys in order to better understand the experience

of apprentices under a variety of delivery and program conditions, and to also have fully disaggregated data with respect to completion/withdrawal status to inform improvements. To enable the recommended analysis of the Annual Apprenticeship survey results by those who completed and those who withdrew, the Ministry will explore the feasibility and cost-effectiveness of increasing the sample size to yield more meaningful results.

The Ministry will also explore enhanced analysis of administrative data to understand reasons for withdrawing or completing by trade, course and training delivery agent as a potential alternative to using a survey sample for this level of analysis.

4.11 Amount of Overdue Loans Is Unknown

The Ministry provides interest-free loans to first-year apprentices in the amount of $300–$800 (depending on the sector) for the purchase of tools, repayable within one year after obtaining certification or within six months of withdrawing from the program. The Ministry has provided $32.8 million in loans since program inception in 1998. According to the Ministry's database, $13.8 million has been repaid as of March 31, 2016, while $4.1 million has been written off as uncollectible, $6.6 million has been forwarded to Ontario Shared Services for collection but not yet written off, and $8.2 million was outstanding.

The Ministry does not have reliable information on how much of the outstanding loan balance is overdue. The Ministry informed us that it relies on a self-declaration from program participants to let it know when they have completed or dropped out of their apprenticeship program, which establishes the date the loan becomes repayable to the Ministry. Failure on the part of the apprentice to inform the Ministry means the loan remains outstanding, but not overdue in its system. We noted that over $4 million in outstanding loans was paid out between 1998 and 2010 to persons who were still recorded in the system as active apprentices.

RECOMMENDATION 15

To ensure loans given to apprentices to purchase tools are collected when they become due, the Ministry of Advanced Education and Skills Development should proactively monitor apprentices' status in the program to quickly identify the date they either complete or withdraw from the program.

MINISTRY RESPONSE

The Ministry agrees and will enhance business processes and information systems to align with this recommendation. The Ministry has also included this program as part of its review of financial supports and incentives, and will introduce any further changes as required.

4.12 Alternative Pathways to Apprenticeship Training Have Not Been Effective

The Ministry has three programs designed to expand access to apprenticeship training. These programs are the Pre-apprenticeship Training Program, the Ontario Youth Apprenticeship Program and the Co-op Diploma Apprenticeship Program, described in **Appendix 1**. These programs have not been as effective as the Ministry originally expected:

- The annual completion rate for participants in the Pre-apprenticeship Training Program, designed to give individuals trade-related skills and experience, was consistently lower (ranging from 61%–69% from 2010/11 to 2014/15) than the targeted completion rate of 75%. Further, only 25% to 33% of program participants went on to become registered apprentices.
- The Co-op Diploma Apprenticeship Program, which allows individuals to register as an apprentice and earn a college diploma at the

same time, has had only a 50% placement rate for on-the-job training.

- For the Ontario Youth Apprenticeship Program, which provides high school students with work experience through co-op, the percentage of those who went on to become apprentices is unknown because of the lack of performance indicators and limited follow-up conducted by the Ministry after high school graduation.

The Ministry informed us that these three programs are currently being redesigned to, among other things, target the programs to those individuals most likely to pursue a registered apprenticeship.

4.12.1 Expert Panel Proposes Action That May Address Some Barriers to Access

In 2015, a local planning board released a study entitled *Barriers to Attracting Apprentices and Completing Apprenticeships*, previously discussed in **Section 4.6.2**. The barriers identified in the board's area were as follows:

- Barriers to apprentice participation included: finding an employer to train under; lack of information on apprenticeships; negative perception of a career in the trades by parents and young people; inequitable hiring practices; and financial costs including low starting wages and the loss of wages while attending in-class portions of apprenticeship training.
- Barriers to employer participation included: lack of journeypeople with adequate mentoring skills or desire to mentor.

Although the Ministry did not yet have concrete plans to address the barriers above, the Premier's Highly Skilled Workforce Expert Panel tabled recommendations on June 23, 2016, which were accepted by Cabinet, that offers suggestions to address some barriers to apprenticeship participation:

- The Ministry should be given the mandate to consult with stakeholders to develop a modernized apprenticeship system that could include moving all education components of an apprenticeship to the beginning of the program and establishing a central application process for anyone wanting to enter.
- Work with industry to expand opportunities for practical learning and commit to ensuring that every student has at least one practical learning opportunity by the end of high school and at least one practical learning opportunity by the time they graduate from post-secondary education.
- Expand the Specialist High Skills Majors Program from 14% of all Grade 11 and 12 students to 25% of all Grade 11 and 12 students, in the next three years. This program provides high school students an opportunity to focus on a career path that matches their skills and interests.

4.13 Ministry Lacks Necessary Data to Ensure Employment Ontario Programs Meet Labour Needs

Although the Ministry collects labour market information (as described in **Section 2.5**), it does not have regional information on labour force supply and skills demand. According to the Ministry, there are few reliable sector-wide sources of information on employers' anticipated labour needs. The lack of regional labour force data, needed to make effective decisions with respect to setting priorities and targeting funding in skills training and education, was also identified as a problem in the 2012 Report of the Commission on the Reform of Ontario's Public Services (Drummond Report).

The Ministry reports on the likelihood of people finding employment in about 200 occupations in Ontario every four years; the last two future employment prospect ratings were published in 2009 and 2013. At the time of our audit, the Ministry was in the process of updating this information to cover the period from 2017 to 2021.

According to the Ministry's website, the ratings focus on recent labour market conditions and projections of demand for new workers, but do not consider the existing or potential supply of workers (such as new graduates and immigrants). The employment prospect ratings are developed for Ontario as a whole, and may not reflect the labour market outlook in the different regions of the province. In comparison, British Columbia and Alberta publish labour market outlook reports, which project occupation demand for the next 10 years, for 500 occupations in the case of British Columbia and 250 occupations in the case of Alberta. Alberta reports labour demand, supply and projected shortage or surplus of labour by occupation every two years. British Columbia reports the number of job openings projected by occupation every year. Both provinces factor in new graduates and forecast migration trends to arrive at their projections.

We also noted that although the Ministry provides more than $6 million per year to 26 local community-based boards to assess local labour market conditions, this information is not factored into funding or programming decisions of the Employment Service program. These local boards conduct autonomous local market research by purchasing data sets from Statistics Canada and conduct various research projects regarding local employment. In December 2015, the Ministry began piloting eight local employment planning councils. These councils are responsible for preparing an annual Community Labour Market Planning Report, which is supposed to identify local labour market challenges, opportunities and recommendations. At the time of our audit, there was no information yet on whether the work of the local employment planning councils being piloted will better inform provincial programming or funding decisions.

To address the lack of detailed labour market information available and used by the Ministry, in June 2016 the Premier's Highly Skilled Workforce Expert Panel recommended that:

- representatives from employers, education, and government, and other partners work together to collect and share provincial and local labour market information from employers;
- the government should use the national Forum of Labour Market Ministers to engage with other provinces and territories to develop an integrated national labour market information system to gather accurate, timely labour market information;
- a labour market information strategy be established—including conducting an inventory and scan of currently available labour market information and data collection—on metrics relevant for both skills development and economic growth across ministries; and
- labour market information should be made public on a website to be used by relevant audiences.

Cabinet accepted all recommendations by the Expert Panel soon after its release.

RECOMMENDATION 16

To ensure funding is spent on training or otherwise preparing people for jobs, better inform program and funding decisions and ensure that skills training promotes occupations with future employment the most likely prospects for long-term sustainable employment, the Ministry of Advanced Education and Skills Development should:

- obtain forecast labour force data by region and occupation, and other labour market information (such as, factoring in new graduates and forecast migration trends) more frequently (such as every two years) and for a longer projected time (10 years, for example); and
- evaluate the work of the local boards and local employment planning councils in informing decision making and take any necessary corrective action.

MINISTRY RESPONSE

As part of the Highly Skilled Workforce Strategy, the Ministry is exploring options to improve local and regional labour market information. The strategy will seek to improve the quality and timeliness of local labour market information, and inform decision-making.

The Ministry is currently updating the Ontario Job Futures publication for the 2017–2021 period, and plans to increase regional and local content as part of ongoing improvements.

The Ministry is also working to improve regional and local labour market information by expanding its scope and depth at the community level. For example, as noted by the Auditor, the Ministry is piloting local employment planning councils in eight communities across Ontario, to build on the existing network of local boards. At this time, no decision has been made about the future of the pilots. Their success in meeting their goals will be measured through an evaluation led by the Ministry and conducted by a third-party consultant. This evaluation will inform whether the councils become a permanent part of the employment and training network.

We are also adding staff at the regional level to gather, analyze and apply information about local labour market conditions, including information produced by local employment planning councils and local boards.

4.14 Little Public Reporting of Employment Ontario Outcomes

The Ministry publishes two goals, though these two goals have not been consistent from one year to the next. For 2014/15 the goals were:

1. that 79% of Employment Service program clients obtain employment or go on to further education/training; and
2. to create employment opportunities for 25,000 youth in Ontario by investing $195 million over two years in the Youth Employment Fund.

In 2015/16, the second goal was replaced with the following:

2. serve up to 150,000 youth over two years through the Ontario Youth Jobs Strategy, including at-risk youth, Aboriginal youth, newcomers and youth with disabilities; with a focus on skills development, labour market connections, entrepreneurship and innovation.

For 2014/15, the most recent year for which results were available, the Ministry publicly reported only on the second goal.

By contrast, for its Postsecondary Education Program, the Ministry publishes (among other things) graduation rates and employment outcomes at six months and two years after graduation for all Ontario universities combined, and individually by university and field of study. Students can use this information to select a university, field of study and future career path. Nothing similar is published regarding employment outcomes for the apprenticeship or employment and training programs.

We also noted that other provinces publicly report on several measures. For example, Alberta reports on 16 measures including client satisfaction, number of registered apprentices, number of apprentices who were issued certificates and apprenticeship completion rates at various stages of their apprenticeship program. Saskatchewan also reports on several performance measures including the increased number of available in-class training spaces and completion rates for non-compulsory and compulsory trades.

For those considering becoming an apprentice, it would be helpful to know what percent of apprentices find employment in their chosen trade upon completion of their program. As well, publishing pass rates for in-class training courses and trade certification exams, and satisfaction survey results by training delivery agent, would also be helpful to apprentices having to choose where to complete the in-class portion of their program. Publishing

completion rates overall by trade, in combination with future employment opportunities given the existing supply of people already in the trade, would help apprentices select which trade to go into.

RECOMMENDATION 17

In order to help job seekers and those considering training for a skilled trade or other learning for employment purposes, the Ministry of Advanced Education and Skills Development should:

- establish yearly reportable outcome measures; and
- publicly report information useful to those upgrading their skills or seeking employment, such as reporting separately on the number of Employment Service clients who obtain employment and those who go on to further training, as well as reporting apprenticeship pass rates and the percent of apprentices that find employment in their chosen trade.

MINISTRY RESPONSE

The Ministry agrees with this recommendation. Previous public reporting was based on minimum requirements of the annual budgeting process.

The Ministry is committed to much more extensive public reporting that will be primarily driven by proactively contributing to Ontario's Open Data initiative. This will maximize access to Ministry data relevant to all of its stakeholders, including job seekers. As a first step, we plan an initial release of six data sets, including outcome data for a number of Employment Ontario programs. The specific set was selected according to the highest-demand information requests from the public. The Ministry is currently planning for ongoing data set releases.

4.15 Duplication of Employment and Training Services

In 2012, the Drummond Report noted that employment and training services in Ontario were offered through multiple ministries. It therefore recommended that the government streamline and integrate these and other employment and training services with Employment Ontario in order to gain administrative efficiencies, improve client access to services and reduce costs.

At the time of our audit, we noted that the government had already integrated youth employment programs offered by the Ministry of Agriculture, Food and Rural Affairs, the Ministry of Northern Development and Mines, and the Ministry of Children and Youth Services, with two programs administered by the Ministry (Youth Job Connection and Youth Job Link). The Ministry did not have information on what (if any) cost savings resulted. It informed us that the intent was not cost saving but rather to provide youth with a single point of access to employment services.

We noted that other ministries were still offering employment services and supports, as noted in **Figure 9**.

The Ministry informed us that it was considering integrating employment and training services offered by the ministries of Community and Social Services and Health and Long-Term Care with those provided by the Ministry through Employment Ontario. The Ministry informed us that it was waiting for advice from the Provincial-Municipal Social Assistance and Employment Committee (a joint working group of provincial and municipal staff created in 2013 to support social assistance reform), on options for integrating Ontario Works Employment Assistance. In addition, the Ministry is waiting for the government to develop a Provincial Employment Strategy for People with Disabilities, as was announced in the 2016 Budget, in order to proceed with the integration of employment services in the Ontario Disability Support Program and Vocational Employment Supports for people with mental health issues.

Figure 9: Employment Services and Supports Offered by Other Ministries

Sources of data: Ministry of Advanced Education and Skills Development

Ministry	Program	Transfer Payments in 2015/16 ($ million)
Community and Social Services	Ontario Works–Employment Assistance	196.3
Community and Social Services	Ontario Disability Support Program–Employment Supports	36.2
Citizenship, Immigration and International Trade	Workplace Training	28.1
Health and Long-Term Care	Mental Health–Vocational Employment Supports	5.9
Total		**266.5**

At the time of our audit, the Ministry informed us that the government had no plans to integrate the workplace training program offered by the Ministry of Citizenship, Immigration and International Trade with Employment Ontario. In this regard, we noted that almost 40% of the service providers funded by the Ministry of Citizenship, Immigration and International Trade to provide employment services were also funded by the Ministry of Advanced Education and Skills Development to provide similar services.

RECOMMENDATION 18

To eliminate duplication in service delivery, the Ministry of Advanced Education and Skills Development should establish timelines for streamlining and integrating employment and training services of the Ministry of Citizenship, Immigration and International Trade across the government with Employment Ontario.

MINISTRY RESPONSE

The Ministry will work with the Ministry of Citizenship, Immigration and International Trade to improve service co-ordination and streamline client pathways between the Bridge Training Program and Employment Ontario Employment Services. In addition, the Ministry will work with Ministry of Citizenship, Immigration and International Trade to identify and remove potential overlap of services for highly skilled immigrant client populations.

Appendix 1: Employment Ontario Programs and Their Funding Through Transfer Payments, Including Tax Credits[1]

Prepared by the Office of the Auditor General of Ontario

Program	Program Start Date	Program Description	2015/16 Federal Funding ($ million)	2015/16 Provincial Funding ($ million)	2015/16 Total Funding ($ million)	% of Funding within Category
Employment and Training						
Employment Service	2010	Allows clients to access a full range of services in one location to help them obtain sustainable employment. Services are client-focused and tailored to meet each individual's needs. They can be provided one-on-one and/or in group format. Services provided fall under five components: 1. Client service planning and co-ordination; 2. Resource and information; 3. Job search; 4. Job matching, placement and incentives; and 5. Job/training retention.	266.1	69.1	**335.2**	44
Second Career	2008	Supports unemployed, laid-off workers who require skills training to find employment in high-demand occupations in Ontario. The ultimate goal of Second Career is to return individuals to employment. Almost 85% of this funding is provided directly to individuals, and the rest to colleges to perform activities in support of the program.	155.7	3.4	**159.1**	21
Canada-Ontario Job Grant	2014	Designed to encourage employers to invest in the skills of jobseekers and employees. Employers are able to choose the training that meets their workforce needs and identify who they would like to have trained. This initiative is cost shared between employers and government, where government will provide two-thirds of the total eligible training costs up to a maximum of $10,000 per trainee, with additional flexibility for small employers.	50.8	13.9	**64.7**	8
Ontario Co-operative Education Tax Credit	1996	A refundable tax credit available to employers who hire students enrolled in a co-operative education program at an Ontario university or college. The maximum credit for each work placement is $3,000.	–	53.9	**53.9**	7
Youth Job Connection	2015	Supports young people with multiple barriers to employment. The program consists of two components: • A year-round component, launched in fall 2015, which helps youth aged 15–29 who are not working, in school or in training. • A summer component, launched April 2016, which provides multi-barriered high school students aged 15–18 with information, summer job opportunities and part-time job placements during the school year to help them make positive educational and career choices.	–	42.6	**42.6**	6

Program	Program Start Date	Program Description	2015/16 Federal Funding ($ million)	2015/16 Provincial Funding ($ million)	2015/16 Total Funding ($ million)	% of Funding within Category
Self-Employment Benefits (SEB) – *Discontinued 2015/16*[2]	2007	Provides entrepreneurial skills development support and financial assistance to help eligible participants develop and implement their business plan and help them start their own business. This financial assistance is intended to cover personal living expenses and other expenses during the initial stages of the business.	40.4	0.4	**40.8**	5
Summer Jobs Service – *Discontinued 2015/16*[2]	1995	A component of the Ontario Summer Jobs Strategy, which unites summer employment programs and services for youth from seven provincial ministries: Advanced Education and Skills Development; Agriculture, Food and Rural Affairs; Children and Youth Services; Economic Development and Growth; Government and Consumer Services; Northern Development and Mines; and Natural Resources and Forestry. Ontario Summer Jobs includes Summer Jobs Service, Summer Company Program, Summer Experience Program, Stewardship Youth Rangers (formerly the Ontario Rangers), Ontario Public Service Summer Employment Opportunities and Summer Jobs for Youth.	–	34.3	**34.3**	5
Ontario Employment Assistance Services	2007	Provides financial support to organizations that deliver employment services to unemployed people with disabilities.	18.2	0.5	**18.7**	2
Targeted Initiative for Older Workers	2009	A joint federal-provincial initiative intended to provide unemployed older workers (aged 55–64) in vulnerable communities (population < 250,000) with programming aimed at increasing their employability, reintegrating them into employment and ensuring they remain active and productive labour market participants.	8.4	1.8	**10.2**	1
Youth Employment Fund – *Discontinued 2015/16*[2]	2013	Employers can receive incentives up to $6,800 per placement to help cover the cost of wages and training for unemployed new hires between the age of 15 and 29 who are not attending school full-time when they provide a job placement of between four and six months.	–	9.5	**9.5**	1
Ontario Job Creation Partnership	2007	Designed to support partnership projects that provide persons receiving employment insurance with opportunities to gain meaningful work experience to improve their long-term employment prospects. Activities of each project are to benefit both the participant and the community with the primary focus being on the participant. The projects can be of varying lengths up to a maximum of 52 weeks.	3.0	0.0	**3.0**	–
Total Employment and Training			**542.6**	**229.4**	**772.0**	**100**

Program	Program Start Date	Program Description	2015/16 Federal Funding ($ million)	2015/16 Provincial Funding ($ million)	2015/16 Total Funding ($ million)	% of Funding within Category
Apprenticeship[3]						
Apprenticeship Training Tax Credit	2004	A refundable tax credit that is available to employers who hire and train apprentices (in certain skilled trades) during the first 36 months of an apprenticeship program. The maximum credit for each apprenticeship is $5,000 per year.	–	200.7	**200.7**	60
Apprenticeship Seat Purchase	Pre-1980	Subsidizes the cost of the in-class component of apprenticeship training.	69.7	7.7	**77.4**	23
Pre-Apprenticeship Training Program	2001	Helps people who are interested in an apprenticeship but lack the skills and experience to gain employment as apprentices.	–	13.6	**13.6**	4
Ontario Youth Apprenticeship Program	1995	Offers the opportunity to train as apprentices while completing their high school diploma.	–	11.1	**11.1**	4
Co-op Diploma Apprenticeship Program	2003	Combines a college diploma program and apprenticeship training leading to a Certificate of Qualification.	–	11.1	**11.1**	4
Apprenticeship Income Supports	2007	Provides temporary financial assistance to apprenticeship clients attending in-class training who are eligible for or who were in receipt of Employment Insurance benefits.	7.7	–	**7.7**	2
Apprenticeship Completion Bonus to Employers	2009	Employers receive a $1,000 bonus for each apprentice that has completed apprenticeship training and received a certificate of apprenticeship and, where applicable, a certificate of qualification, while in their employment.	–	4.6	**4.6**	1
Apprentice Completion Bonus in Non-Red Seal Trades	2009	Provides a $2,000 taxable bonus to apprentices completing training in any Ontario non-Red Seal trade. This complements the $2,000 federal Apprenticeship Completion grant in Red Seal Trades.	–	4.1	**4.1**	1
Examination Preparation Supports	2009	Provides support for up to 30 hours of dedicated class time to prepare apprentices to succeed in their trade certification exam.	–	2.0	**2.0**	1
Support for Non-Employment Insurance Eligible Apprentices During In-Class Training	2010	Provides up to $1,500 in support to apprentices who are not eligible for Employment Insurance while completing their classroom training.	–	0.6	**0.6**	–
Total Apprenticeship			**77.4**	**255.5**	**332.9**	**100**

Program	Program Start Date	Program Description	2015/16 Federal Funding ($ million)	2015/16 Provincial Funding ($ million)	2015/16 Total Funding ($ million)	% of Funding within Category
Foundation Skills						
Literacy and Basic Skills	1997	Provides free training services to adults whose skills fall below Grade 12 of the Ontario Curriculum and who have difficulty in English or French, to help them develop and apply communication, numeracy and digital skills. This program primarily serves adult learners who want to improve their literacy and numeracy skills to achieve their goals of employment, post-secondary, apprenticeship, secondary school credit and independence. The program is delivered through colleges, school boards and community-based organizations. There are four delivery streams: Aboriginal, Anglophone, Deaf and Francophone.	55.3	30.4	**85.7**	95
Ontario Bridging Participant Assistance Program (OBPAP)	2010	Provides bursaries of up to $5,000 to cover direct education costs (e.g., tuition, books and equipment) for eligible applicants with financial need attending OBPAP approved bridge training programs at Ontario post-secondary education institutions. The program is administered jointly with the Ministry of Citizenship and Immigration, which identifies and approves bridge training programs eligible for OBPAP funding.	–	4.9	**4.9**	5
Total Foundation Skills			**55.3**	**35.3**	**90.6**	**100**
Labour Market						
Local Boards	1994	Twenty-six local boards across Ontario lead local labour market planning. These boards are community-based groups whose primary role is to assess local labour market conditions and work with community stakeholders to address local labour market issues.	6.8	0.2	**7.0**	48
Local Employment Planning Councils (beginning 2015/16)	2015	Groups acting as a connection between local stakeholders being piloted to improve labour market conditions in local communities by: • Expanding the understanding of local labour market issues and improving access to labour market information, • Supporting integrated planning by serving as a central point of contact for linking employers, service providers, and other government and community stakeholders, • Serving as a hub for connecting employers, and other employer groups with employment and training services, • Collaborating with community stakeholders to develop projects related to the research and piloting of innovative approaches, and • Working with provincial and community organizations to identify and share best practices.	2.9	0.3	**3.2**	22

Program	Program Start Date	Program Description	2015/16 Federal Funding ($ million)	2015/16 Provincial Funding ($ million)	2015/16 Total Funding ($ million)	% of Funding within Category
Ontario Labour Market Partnership	2007	Provides financial assistance to local communities, employers, sector groups and employee and employer associations to aid the development and implementation of strategies that address and respond to labour force adjustments, local economic development and human resource planning needs.	1.8	–	**1.8**	12
Adjustment Advisory Program	1980	To provide funding for advisory and financial assistance to help individuals adjust to the impacts of job loss, or threatened job loss in the workplace. An action centre may also be established on a temporary basis for large scale plant closures where workers can go to receive services.	1.4	–	**1.4**	10
Skills Canada	2002	A national, not-for-profit organization that actively promotes careers in skilled trades and technologies to Canadian youth. To encourage and support a co-ordinated Canadian approach to promoting skilled trades and technologies to youth.	–	0.8	**0.8**	5
Ontario Human Capital Research and Innovation Fund	2007	Provides financial support for research projects to identify better ways to help people prepare for, return to or keep employment and become productive participants in the labour force. The fund is designed to support the evidence base for program and policy development in the areas of post-secondary education, labour market, and employment and training policy.	0.5	–	**0.5**	3
Total Labour Market			**13.4**	**1.3**	**14.7**	**100**
Overall Total			**688.7**[4]	**521.5**	**1,210.2**[5]	

1. Transfer payments are to third-party service providers unless otherwise specified.
2. Programs discontinued in 2015/16 did not accept new clients, but continued to provide services to existing clients.
3. An additional $0.7 million in loans was made to first-year apprentices to assist them in purchasing tools. Because this amount is repayable, it is not included in the chart.
4. The federal government provided Ontario with an additional $146 million for program administration and $6.4 million in funding carried forward for future use, for a total of $841.1 million.
5. The Ministry spent an additional $96.2 million in direct operating costs (including administering a call centre and job bank) for a total operating cost of $1.3 billion.

Appendix 2: Roles and Responsibilities of Ministry Staff and Third-Party Service Providers Regarding Employment and Training Services

Source of data: Ministry of Advanced Education and Skills Development

Ministry of Advanced Education and Skills Development

The Employment and Training Division consists of three corporate departments with a total staff of 244 responsible for:
- Developing and implementing strategic and operational policy;
- Financial management and accountability;
- Information systems management and support;
- Providing templates for contracts with third-party service providers;
- Financial and program reporting, planning and analysis; and
- Staff and external stakeholder relations and communications.

Regional Offices (Central, Eastern, Northern, and Western Regions)

The four offices have a combined staff of 121 and provide support for regional Employment Ontario programs, including:
- Financial management of transfer payment budgets and direct operating expenses;
- Internal information systems for both service providers and individual clients to support financial governance;
- Collection and analysis of financial and service program information to support program operations; and
- Strategic direction and leadership to local offices for service delivery.

Local Offices

With a total staff of 452, the 39 local offices are responsible for:
- Managing the Ministry's contractual agreements with third-party service providers;
- Monitoring the delivery of services provided by third-party service providers; and
- The direct delivery of the Second Career program to clients.

Third-Party Service Providers

There are 400 third-party service providers (operating about 700 individual sites) contracted by the Ministry to deliver Employment and Training programs and services. They are required to:
- Assess client needs and eligibility requirements for available programs;
- Provide opportunities to connect job seekers and employers through workshops and job fairs;
- Assist clients with completing registrations, applications and submissions for access to education, training programs and income support; and
- Monitor client progression through services provided, including exit interviews, follow-ups and evaluations.

Appendix 3: Description of the Funding Model for the Employment Service Program

Source of data: Ministry of Advanced Education and Skills Development

The funding model used by the Ministry to determine the amount of funding for each third-party provider of employment services has three main inputs:

1. Assisted service intake targets: The targeted number of clients for which an Employment Service Plan will be developed to guide their job search, education or training within a given year.
2. Labour market indicators: Employment and demographic conditions within the service provider's community.
3. Location indicators: The relative cost of doing business in a particular community.

These inputs are used to determine three funding amounts for each service provider site:

1. Operating funds, calculated based on the average of location and labour market information inputs multiplied by the targeted number of assisted clients;
2. Employer incentives for hiring candidates, calculated at $190 per targeted assisted client; and
3. Client supports to reduce barriers to employment (such as bus passes, clothing and child care), calculated at $10 per targeted assisted client.

Employer incentives and client supports are budgeted based on the above calculation, but instalment payments are adjusted throughout the year to reflect actual incentive and supports used.

Appendix 4: The Ontario College of Trades

Source of data: The Ontario College of Trades

The Ontario College of Trades (College) is an industry-driven, professional regulatory body that regulates and promotes skilled trades. The primary function of the College is to ensure that individuals performing the skills of compulsory trades (trades in which one must be certified to practice, e.g., plumber) have the training and certification required to legally practise in Ontario.

Governance

The College's governance structure includes:

- a *Board of Governors* composed of 21 members representing both employers and employees in the skilled trades system and the general public;
- four *Divisional Boards* representing the four skilled trades sectors (construction, industrial, motive power and service);
- *Trade Boards* representing individual trades; and
- a roster of adjudicators to serve on review panels for both the journeyperson-to-apprentice ratios and classification of trades as compulsory or voluntary.

All appointments to the various boards and review panels are made by the College of Trades Appointments Council, which is an agency of the Ontario Government.

A Memorandum of Understanding (MOU) was established in August 2013 between the Ministry and the College that guides their relationship and outlines their responsibilities. Further to this, senior officials from both the Ministry and the College meet semi-annually as part of a joint committee to:

- jointly establish long-term strategic direction under the MOU;
- ensure alignment of resources to support the MOU;
- keep each party updated on developments or priorities that may affect the Ministry's or College's abilities to meet their obligations under the MOU or the *Ontario College of Trades and Apprenticeship Act, 2009;* and
- exchange information about each party's strategic direction and other corporate requirements, as appropriate.

Membership

The College is funded by membership fees. Members include all apprentices and certified workers, such as journeypersons in compulsory trades and those in voluntary trades that choose to join. Employers and sponsors are also members of the College. At the time of our audit, annual membership dues were $60 for apprentices and $120 for certified workers and employers.

Establishment

The Ontario College of Trades was established in April 2013 under the *Ontario College of Trades and Apprenticeship Act, 2009* as a result of a 2008 report by T.E. Armstrong Consulting commissioned by the Ministry. At the time of the review, there was dissatisfaction within the skilled trades community, particularly surrounding processes for determining trade classifications and journeyperson-to-apprentice ratios, and a desire for industry-led governance in the trades system. The consultant was asked to consider the impact of expanding compulsory certification to existing voluntary trades for health and safety reasons, the registration of new apprentices, rates of apprenticeship program completion, consumer protection, economic impact and any other relevant factors. The consultant recommended that the Ministry meet with stakeholders to establish

a new, all-trades governance institution —the Ontario College of Trades. Functions of the College were recommended to include the establishment of expert panels to consider applications for compulsory certification and provide advice to the Minister; engagement in certification enforcement; promotion of the profile and status of the trades; and periodic reviews of journeyperson-to-apprentice ratios.

When the College began, the following responsibilities were transferred over from the Ministry:

- establishing the skills required for each trade;
- the classification of trades as compulsory or voluntary;
- enforcement;
- issuing certificates of qualification;
- establishing apprenticeship programs; and
- determining apprentice-to-journeyperson ratios.

The College also acquired new responsibilities, including the promotion of the skilled trades and the administration of a publicly accessible register of tradespeople.

The Ministry paid a total of $22.7 million to establish the Ontario College of Trade between the 2011/12 and 2013/14 fiscal years. No Ministry funding has been provided for subsequent fiscal years.

Ministry-Commissioned Review of Key Processes

In October 2014, the Minister appointed Tony Dean (the former Secretary of Cabinet) to undertake a review of key areas of Ontario's skilled trades system within the mandate of the College. A report was issued in 2015 with 31 recommendations to the College to improve processes related to the scope of practice of trades, trade classification and reclassification reviews, journeyperson-to apprenticeship ratio reviews, enforcement of the *Ontario College of Trades and Apprenticeship Act*, and decisions made by the Ontario Labour Relations Board.

Appendix 5: The Apprenticeship Training Program in Ontario

Source of data: Ministry of Advanced Education and Skills Development

Apprenticeship Training

To become certified in a skilled trade, a candidate must be at least 16 years of age and meet the necessary academic entry requirements. They are required to:

1. Find an employer to act as a sponsor and agree to provide the required on-the-job training.
2. Submit (along with their employer) an application for apprenticeship training to the Ministry.
3. Register (along with their employer) a training agreement with the Ministry, if the Ministry determines that both parties are eligible.
4. Become a member of the College (and pay the required fees) in order to maintain the registered status of the training agreement.
5. Complete the required on-the-job training under the direction of a qualified and skilled person in the trade, as specified by the College.
6. Complete the required in-class training, conducted by training delivery agents (both colleges and non-colleges) on a curriculum approved by the College. The Ministry schedules this training for the apprentice and the employer is required to allow the apprentice time off to attend classes.
7. Receive a Certificate of Apprenticeship, which is issued by the Ministry upon completion of all requirements (on-the-job and in-class training) of the apprenticeship program for the given trade. Note: Apprentices who lose their employer are allowed to continue in the program and attend in-class training sessions for up to one year. However, in order to earn their Certificate of Apprenticeship, these apprentices are still required to complete both in-class and on-the-job training hours.

The following steps are required for compulsory trades and optional for apprentices training in voluntary trades that offer a Certificate of Qualification:

8. Write and pass a final certification exam given by the Ministry on behalf of the College.
9. Receive a Certificate of Qualification from the College.
10. Register with the College as a journeyperson.

Roles and Responsibilities

The responsibilities of key parties in supporting apprentices through the training process are described as follows:

The Ministry of Advanced Education and Skills Development (Ministry)

- Assesses eligibility of apprentice, sponsor, on-the-job trainer and in-class training delivery agent to participate in apprenticeship training;
- Registers training agreements between the apprentice, sponsor and Ministry;
- Purchases in-class training from training delivery agents and schedules in-class training for apprentices;
- Issues Certificates of Apprenticeship to apprentices; and
- Administers certification exams on behalf of the Ontario College of Trades.

The Ontario College of Trades

- Regulates people practising the skilled trades in Ontario through the enforcement of trade qualifications;
- Establishes the scope of practice and standards for trades including curriculum, on-the-job training requirements, ratios of journeyperson-to-apprentice and certification exams;
- Issues Certificates of Qualification to apprentices; and
- Sets wages for apprentices in certain trades.

Training Delivery Agents

- Deliver classroom training based on approved curriculum standards; and
- Must be approved as a training delivery agent by the Ministry. At present this includes all of Ontario's 24 colleges of applied arts and technology or 43 non-colleges (33 union-sponsored training centres, six not-for-profit training institutions, two employer-sponsored training centres, and two private career colleges).

Sponsor/Employer

- Provides on-the-job training;
- Meets the journeyperson-to-apprentice ratio requirements;
- Agrees to allow the apprentice time off to complete required classroom training;
- Ensures personnel, equipment and machinery used to deliver training meet Ministry standards and are in compliance with all occupational legislation; and
- Decides when the apprentice has completed on-the-job training requirements and provides the College with documentation to support this decision.

On-the-Job Trainer (Journeyperson)

- Responsible for training the apprentice as directed by the sponsor; and
- Must possess a Certificate of Qualification (if providing training for a compulsory trade) or either a Certificate of Qualification, a Certificate of Apprenticeship or equivalent (if providing training for a voluntary trade).

Alternative to Apprenticeship Training

It is possible to become a certified tradesperson without completing the apprenticeship program described above. Candidates that can demonstrate they have the equivalent credentials and work experience can apply for advanced standing and be allowed to write the Certificate of Qualification exam for that trade. This could apply to people who were trained in another country or province, in the military, or Ontarians who completed a diploma program and/or had work experience in the trade. The College will conduct a trade equivalency assessment to determine if the candidate has achieved the necessary skills for the scope of the trade. A trade equivalency assessment is also conducted to verify the validity of out-of-province certification in a Red Seal trade (trades whose credentials are recognized across the country).

In 2015, Ontario received applications from almost 5,200 individuals to write the Certificate of Qualification exams through the equivalency process—56% were Ontario residents, 35% were foreign trained, 8% held certificates or a Red Seal issued by another province, and 1% held a certificate issued by the military. These individuals typically had a lower exam pass rate than apprentices who wrote the exams.

Funding Method for In-Class Training

Annually, the Ministry enters into a contract with every training delivery agent for each approved apprenticeship training course. The contract specifies the maximum funding amount for an approved number of apprenticeship spaces (or classroom seats), negotiated between the parties, that is supposed to take into consideration previous enrolment, forecast demand, and overall available Ministry funding. Only apprentices with an active training agreement registered with the Ministry are eligible to enrol for in-class training.

The Ministry pays training delivery agents a per diem per seat. This per diem rate increased from $57.35 in 2008/09 to $61.36 in 2015/16, and again to $63.09 in 2016/2017. The apprentice pays an additional fee of $10 per day. Funding from both the Ministry and apprentices is meant to cover both fixed and variable costs. The maximum contract amount equals the approved number of spaces multiplied by the per diem rate. The length of training is typically 40 days.

Under the contracts, the Ministry requires training delivery agents to submit year-end audited financial information. The Ministry is to reconcile the amount of funding provided to the audited program expenses submitted, and recover any unspent funds, usually by adjusting the amount of future payment instalments.

Ministry of the Environment and Climate Change

Environmental Approvals

1.0 Summary

Under the *Environmental Protection Act* and the *Ontario Water Resources Act*, anyone who wants to engage in activities in Ontario that release contaminants into the air, land or water—or transport, store or dispose of waste—must obtain an environmental approval from the Ministry of the Environment and Climate Change (Ministry). In this report, anyone releasing a contaminant or pollutant is referred to as an emitter. The *Environmental Protection Act* broadly defines a contaminant to include solids, liquids, gases, odours, heat, sound, vibrations and radiation resulting from human activities that can cause harm to the environment and human health.

In 2010, the Ministry launched its Modernization of Approvals initiative intended to make the environmental approvals program more accessible, flexible and efficient. As part of the initiative, the Ministry:

- introduced the self-registration process for lower-risk activities such as automotive refinishing, non-hazardous waste transportation and commercial printing (prior to this, all emitters had to apply for and receive Ministry approval); and
- implemented an online database of emitters that is intended to allow the public to search for approved emitters within their neighbourhood.

According to the Ministry, air quality in Ontario has improved significantly over the past 10 years due to measures such as the closing of coal-burning plants that resulted in decreases in air pollutants such as sulphur dioxide, volatile organic compounds and fine particulate matter. These decreases are in line with trends in other provinces in Canada. However, according to Environment Canada, Southern Ontario has the highest level of sulphur dioxide and second-highest level of fine particulate matter emissions compared to four other large Canadian regions.

In addition, based on the most recently available data from Environment Canada, from 2010 to 2012, water quality in 22% of freshwater rivers in Ontario was rated as being less than fair—that is "marginal" or "poor" quality—worse than the national average of 14%. Also, in 2013, Ontario released the largest amount of mercury and lead into its water compared to other provinces, representing 33% and 28%, respectively, of the total national releases.

Overall, our audit found that the Ministry's environmental approvals program is not effectively managing the risks to the environment and human health from polluting activities. The weaknesses we identify below undermine the objective of the

Environmental Protection Act and the *Ontario Water Resources Act*, which is to protect and conserve the province's natural environment. Specifically:

- **A significant number of emitters may be operating without proper environmental approvals:** While the Ministry has some processes to identify emitters that are operating without the required environmental approvals, its approach is largely reactive. By the time the emitters are identified and the Ministry takes action, the emitters have often been operating without proper approvals for years. The Ministry has not taken a proactive approach. For example, it has not established information-sharing agreements with other Ontario ministries with information on newly operating emitters that could help the Ministry identify illegal emitting activities at an earlier stage. Our analysis of data we obtained from a leading business directory that collects the names of businesses for each business sector indicates that there may be about 12,000 emitters in the province that are not in the Ministry's emitter database. The Ministry has not performed a similar comparison to identify potential emitters that may be operating without a proper approval.
- **Over 200,000 approvals issued more than 15 years ago have not been updated to meet current environmental standards or to reflect emitters' current operations:** Approvals prior to 2000 did not contain many of the operational requirements that similar current approvals include, such as having properly trained staff and well-maintained equipment. The Ministry largely relies on the emitter to request that its approval be updated when it changes its operations, but emitters do not always do so. The Ministry does not know how many of the emitters that were issued those approvals are still operating.
- **The Ministry's monitoring efforts are not sufficient to prevent and detect emitters that violate regulatory requirements and therefore pose a risk to the environment and human health:** Approximately 80% of the 32,500 emitters that have been issued approvals in the last 15 years have never been inspected—despite the fact that there is a high level of non-compliance by emitters that *have been* inspected. For example, in the last five years, 20% of the 4,147 hazardous-waste-related inspections, 35% of the 4,876 air-related inspections and 47% of the 1,228 sewage-related inspections identified emissions in excess of environmental standards. Also, in 2014/15, 63 inspections of automotive refinishing facilities indicated that 86% did not comply with environmental requirements. For example, facilities were closer than the minimum distance of 120 metres from the places where people live, work and play, or they did not retain records of how much air pollution they had emitted.
- **Penalties levied by the Ministry often did not deter repeat offenders:** One-third of the emitters that were issued penalties from 2009 to 2016 were issued penalties for more than three violations. For example, one emitter was issued penalties for 24 violations in eight of the last nine years, totalling more than $173,000. Another emitter was issued penalties for 13 violations in seven of the last nine years, totalling more than $192,000. The Ministry had not assessed whether its penalties were effective in discouraging individual companies from repeatedly violating environmental regulations.

We also found that, despite being mandated by the Premier in 2014 to "put greater emphasis on the 'polluter pays' principle," the Ministry bears the brunt of the costs of delivering the environmental approvals program, including costs of future clean-up. Specifically:

- **The Ministry only recovers 20% of its cost of delivering the program:** Application and self-registration fees obtained from emitters do not cover all of the Ministry's costs for

administering the environmental approvals program. In 2014/15, such fees covered only about 20% of the program's $23 million costs. The application fees have not been updated since 1998.

- **Financial security is not required for many high-risk activities:** The *Environmental Protection Act* gives the Ministry the authority to require financial security from emitters to cover future clean-up costs. However, we found that the Ministry does not always require financial security from high-risk activities such as hazardous waste transporters, industrial sewage systems and other industrial activities that are likely to result in contaminant spills.
- **Financial security amounts collected are less than estimated future clean-up costs:** The amount required from emitters—and imposed as a condition of the Environmental Compliance Approval—is usually based on the most reasonable estimate for future clean-up. However, our review of a sample of emitters has indicated that the Ministry has collected approximately $10 million less than what it estimated would be required for future clean-up.
- **The Ministry is at risk of paying clean-up costs due to outdated remediation estimates:** Even though our audit work indicated that the estimated remediation costs (the costs to reverse or stop environmental damage) could increase greatly over a period of 10 or more years, in many cases the Ministry does not re-evaluate its long-term remediation cost estimates to determine whether it needs to collect more in financial security from emitters to cover the costs. This exposes the Ministry to the risk of having to pay potentially large clean-up costs if the emitter is unable or unwilling to pay for remediation.

With regard to public involvement in the environmental approvals program, we found the following:

- **Public input is blocked for self-registered emitters:** The public does not have an opportunity to provide input on any of the self-registered activities—which include end-of-life vehicle processing facilities (wrecking yards) as well as commercial printing and others—prior to the emitters starting operations. Given that the Ministry—as part of its modernization initiative—plans to convert many more activities that are currently subject to public input to those that are not, opportunities for meaningful public input will be reduced in the future.
- **Public complaints are not well managed:** The Ministry received approximately 78,000 public complaints and reports of contaminant spills in the last five years, which it tracks in a database. However, the Ministry does not consistently follow up on complaints or reports of contaminant spills on a timely basis or categorize them by their underlying problem. As a result, it is not able to identify and act upon systemic issues to improve the environmental approvals process. For example, at the time of our audit, over 1,800 complaints had not yet been assigned to a Ministry field inspector for follow-up. In addition, about 900 complaints that the Ministry determined to have warranted a field inspection had not yet been addressed.
- **The publicly accessible emitter database is not functioning as intended:** The publicly accessible emitter database maintained by the Ministry cannot perform the basic searches for which it was designed, such as searching for emitters in a particular neighbourhood.

The Ministry does not know whether its environmental approvals program is effectively regulating polluting activities and how much impact such activities have on human health. In particular, self-registered emitters are not required to provide the Ministry with emissions information. This results in the Ministry not knowing whether levels of pollution from these activities are above approved levels.

At the same time, when the Ministry does receive emissions information from higher-risk emitters, it does not assess the environmental and health impacts of those emissions within various regions of the province. Instead, each emitter's data is only reviewed by the Ministry for compliance with its environmental approval limits.

This report contains 12 recommendations, consisting of 31 actions, to address our audit findings.

OVERALL MINISTRY RESPONSE

The Ministry appreciates the Auditor General's observations and recommendations regarding the environmental approvals program and will continue to take actions to improve it.

The protection of Ontario's natural environment is done through a comprehensive approach, which includes legislation, regulations, compliance, enforcement and monitoring activities as well as the issuance of environmental approvals. In addition, it includes the development of rigorous standards for emissions in order to protect human health and ecosystems.

The Ministry recognizes the importance of ensuring that environmental approvals are effective at managing risks to the environment. This includes stringent standards that are among the most protective in North America. These standards are updated on a regular basis.

Ontario has one of the most broadly based financial assurance approaches in Canada. The Ministry will pursue improvements to further strengthen its financial assurance program.

The Ministry is proud of the work it has done in the past 10 years to the significant improvement of Ontario's air quality. It is committed to further integrating the assessment of cumulative effects into its decision-making to continue improving Ontarians' health and the province's environmental quality.

The Ministry will continue focusing its compliance efforts and resources on higher-risk sectors and activities that have the greatest potential to have impacts on the environment and human health. Utilizing this approach, combined with the Ministry's suite of abatement and enforcement tools, best ensures effective environmental oversight of emitters.

The Ministry is modernizing its compliance system, which will allow it to strengthen its risk-based process for inspections. This new system will facilitate the risk ranking of individual facilities and will include performance metrics to allow the Ministry to measure the efficacy of the inspection program. This further ensures it is targeting high-risk emitters.

The Ministry appreciates the efforts of the Office of the Auditor General in helping to further improve the protection of the environment through the approvals program.

2.0 Background

2.1 Overview of Environmental Approvals in Ontario

The environmental approvals program began in 1957 after the *Ontario Water Resources Commission Act* was passed. This act, which prohibited the discharge of polluting substances that may impact water quality, was later replaced by the *Ontario Water Resources Act* in 1972. The *Environmental Protection Act*, passed in 1971, expanded the scope of environmental approvals to protect the air and land.

The *Environmental Protection Act* and the *Ontario Water Resources Act* require anyone planning to engage in activities in Ontario that release contaminants or pollutants into the air, land or water—or transport, store or dispose of waste—to obtain an environmental approval from the Ministry of the Environment and Climate Change (Ministry). Such environmental approvals are required of all emitters—private-sector businesses as well as municipalities and provincial ministries and agencies.

A contaminant is defined in the *Environmental Protection Act* as "any solid, liquid, gas, odour, heat, sound, vibration and radiation resulting from human activities that may cause harm to the environment or human health." There are currently three categories of activities for which an environmental approval is required, depending on which aspect of the environment is affected by the emissions:

- air and noise emission into the air;
- waste management activities on land; and
- sewage emission into the water or land.

There are two ways to obtain an environmental approval from the Ministry:

- Emitters involved in lower-risk activities can self-register by completing an online form. Examples of such activities include commercial printing, automotive refinishing and wrecking yards.
- Emitters involved in higher-risk activities must apply to the Ministry for an Environmental Compliance Approval. Examples of such activities include operating landfills, steel mills and chemical manufacturing facilities.

The differences between the two types of environmental approvals are described in **Section 2.2**.

This two-stream approvals framework was implemented in 2011. Prior to the introduction of the self-registration process for lower risk activities, all emitters had to receive Ministry approval.

2.1.1 Modernization of Approvals Initiative

In October 2010, the Ministry launched its Modernization of Approvals initiative, which was intended to make the environmental approvals program more accessible, flexible and efficient. The initiative involved legislative and administrative changes, as well as the implementation of new information systems.

Legislative and Administrative Changes

The *Open for Business Act, 2010* amended the *Environmental Protection Act* and the *Ontario Water Resources Act* to create the self-registration process for certain lower-risk or less complex activities. The Ministry did this to reduce "unnecessary regulatory requirements." These activities are listed within regulations in the *Environmental Protection Act*. All remaining activities—those that are more complex and unique—require Environmental Compliance Approvals.

Information System Changes

In 2011, the Ministry implemented the following two information systems:

- the Environmental Activity and Sector Registry—a public, web-based system that allows lower-risk emitters to self-register eligible activities by completing an online form; and
- Access Environment—a publicly accessible database of those emitters to which the Ministry has issued environmental approvals. Its purpose is to allow the public to search for approved emitters in their neighbourhoods and view the conditions of those environmental approvals.

The Ministry is currently developing an Electronic Environmental Compliance Approval system that will allow higher-risk emitters to electronically submit their applications for Environmental Compliance Approvals. In March 2015, the Ministry began a "graduated launch" of the new system, which allowed certain emitters to submit applications and supporting documents electronically.

2.1.2 Ministry Organizational Structure

The Operations Division—the Ministry's main service delivery arm—delivers the environmental approvals program. Approximately 90 staff in the Ministry's head office in Toronto conduct technical reviews across many Ministry programs, including reviews of environmental approval submissions. In

addition, approximately 190 staff in the Ministry's five regional and 22 local offices across the province assist in the technical reviews and are responsible for enforcing the environmental approvals program as well as other programs.

In 2014/15, the Ministry spent over $23 million to deliver the environmental approvals program, most of which was in salaries. This amount does not include the cost of enforcement activities.

2.2 Types of Environmental Approval

Depending on the nature of their activities, emitters must obtain an environmental approval either by completing an online registration form or applying to the Ministry for an Environmental Compliance Approval.

In the last five years, approximately 4,300 lower-risk emitters have self-registered their activities, and about 7,900 higher-risk emitters have applied for and received Environmental Compliance Approvals from the Ministry. **Figure 1** shows the

Figure 1: Self-Registrations and Environmental Compliance Approvals, 2011/12–2015/16
Source of data: Ministry of the Environment and Climate Change

	2011/12	2012/13	2013/14	2014/15	2015/16	Total Over 5 Years
Self-Registrations						
Automotive refinishing[1]	102	375	59	60	108	**704**
Heating systems[2]	252	960	176	136	256	**1,780**
Standby power systems[3]	157	422	172	292	209	**1,252**
Non-hazardous waste transportation[4]	n/a	30	118	152	149	**449**
Solar facilities[5]	n/a	9	42	46	52	**149**
Commercial printing[6]	n/a	n/a	1	4	6	**11**
End-of-life vehicle processing[7]	n/a	n/a	n/a	n/a	n/a	n/a
Total Self-Registrations[8]	**511**	**1,796**	**568**	**690**	**780**	**4,345**
Environmental Compliance Approvals[9]						
Air/noise[10]	706	391	331	426	557	**2,411**
Industrial sewage	144	144	134	84	149	**655**
Municipal and private sewage	987	1,111	1,004	897	1,014	**5,013**
Waste disposal sites	38	33	18	24	27	**140**
Waste management systems	170	142	42	35	40	**429**
Total Environmental Compliance Approvals	**2,045**	**1,821**	**1,529**	**1,466**	**1,787**	**8,648**

1. Includes the repair or customization of a motor vehicle body or its interior. Activity became eligible for self-registration on October 31, 2011.
2. Includes the operation of any apparatus or mechanism that uses natural gas or propane to produce heat or to supply heat to the interior of a building or structure. The activity became eligible for self-registration on October 31, 2011.
3. Standby power systems that use biodiesel, diesel, natural gas or propane, the rated capacity of which does not exceed 700 kilowatts. The activity became eligible for self-registration on October 31, 2011.
4. Waste must be transported by trucks or other similar motor vehicles, such as vans, pickup trucks, and cars, on public roads. Transportation by air, rail or barge is not eligible for self-registration. In addition, waste cannot be stored even overnight. The activity became eligible for self-registration on November 18, 2012.
5. Solar facilities with solar photovoltaic collector panels that are not mounted on the roof or wall of a building (i.e., ground-mounted) and have a maximum power output of less than 750 kilovolt-amps. The activity became eligible for self-registration on November 18, 2012.
6. Commercial printing—including lithographic, screen and digital printing—became eligible for self-registration on November 18, 2012.
7. End-of-life vehicle processing sites (i.e., wrecking yards) became eligible for registration on September 30, 2016.
8. If any of the above eligibility requirements are not met, then an Environmental Compliance Approval is required.
9. Includes new Environmental Compliance Approvals only (i.e., does not include amendments to existing Environmental Compliance Approvals).
10. Environmental Compliance Approvals are issued based on the activity and which aspect of the environment is affected by the emissions. For example, air/noise approvals are issued for emissions into the air.

number of self-registrations and Environmental Compliance Approvals that have been issued by the Ministry in the last five years.

2.2.1 Self-Registrations

The Ministry determines whether an activity is eligible for the self-registration process based on how common the activity is in Ontario, its complexity (that is, whether the industry uses complex processes or pollution control measures), the historical results of that industry's compliance rate with environmental standards, and the risks to the environment if its emissions are not controlled. The self-registration process is intended for activities that:

- pose minimal risk to the environment and human health as long as specific rules are followed; and
- use equipment and processes that are standard to the industry with known environmental impacts.

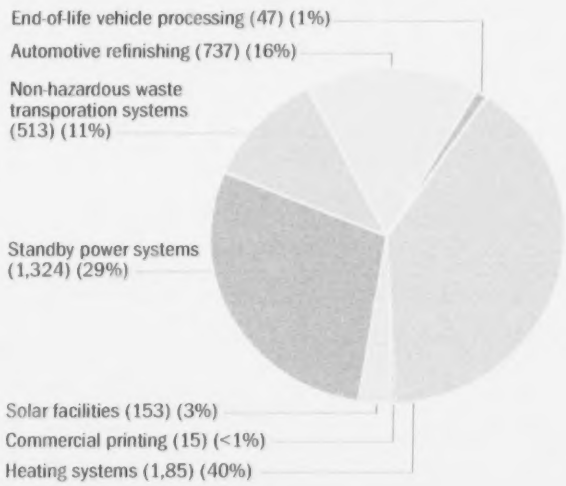
Once the Ministry determines that a particular activity meets the criteria for self-registration, it passes a regulation under the *Environmental Protection Act* making that activity eligible for self-registration and setting the standards that the emitters must follow in conducting the registered activities. The emitter can start operations after completing the online registration form and paying a one-time registration fee of $1,190.

Currently, emitters can self-register seven types of commercial activities: automotive refinishing, commercial printing, non-hazardous waste transportation, wrecking yards, heating systems, solar facilities and standby power systems. Approximately 4,600 emitters have self-registered since the registration process was launched in 2011. **Figure 2** provides the breakdown of self-registered emitters as of July 31, 2016.

Self-registered emitters must comply with environmental standards and operate appropriate equipment and controls as set out in the regulation. If a self-registered emitter does not comply with the eligibility or operational requirements outlined in the regulation, then the emitter is required to apply for an Environmental Compliance Approval.

Figure 2: Self-Registrations by Type of Activity[1] as of July 31, 2016[2]

Source of data: Ministry of the Environment and Climate Change


End-of-life vehicle processing (47) (1%)
Automotive refinishing (737) (16%)
Non-hazardous waste transporation systems (513) (11%)
Standby power systems (1,324) (29%)
Solar facilities (153) (3%)
Commercial printing (15) (<1%)
Heating systems (1,85) (40%)

1. The figure above includes seven activities currently eligible for registration, and reflects only emitters that have registered. These numbers do not reflect all emitters that are currently engaging in these activities because the onus of registering is on the emitter. See **Section 4.1.2** of this report for more details on whether the volume of registrations above accurately reflects the number of emitters engaging in such activities.
2. The figure data is as of July 31, 2016, instead of the end of the 2015/16 fiscal year (March 31, 2016). This is the most recent data available for self-registrations. This most recent data allows us to include the 47 end-of-life vehicle processing self-registrations (all occurring after March 31, 2016). Although end-of-life vehicle processing became eligible for self-registration on September 30, 2016, emitters could register early as of March 31, 2016.

2.2.2 Environmental Compliance Approvals

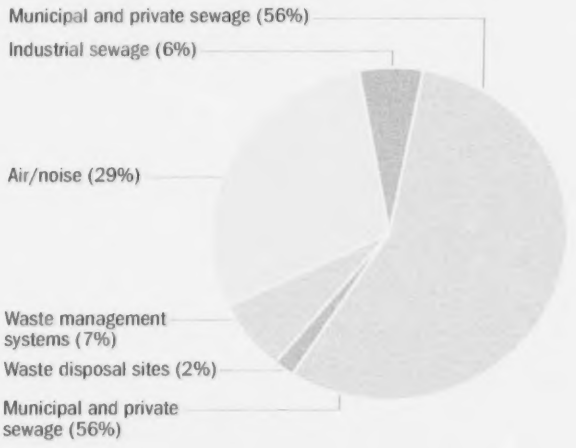
An Environmental Compliance Approval is required for all activities that are not eligible for self-registration. Such activities include operating chemical manufacturing plants, sewage treatment plants and landfills. The Ministry issued approximately 30,900 new approvals to about 24,600 emitters between December 1999—when it implemented the information system it currently uses to administer the environmental approvals program—and 2011,

when it introduced the self-registration system for lower-risk emitters.

Since 2011, 8,600 Environmental Compliance Approvals have been issued to 7,900 emitters for higher-risk activities. As of March 31, 2016, about 28,500 emitters were holding Environmental Compliance Approvals. **Figure 3** provides the breakdown of these Environmental Compliance Approvals by type of activity.

Figure 3: Environmental Compliance Approvals by Type of Activity as of March 31, 2016

Source of data: Ministry of the Environment and Climate Change



Note: This figure includes all environmental approvals issued from December 1999, when the Ministry implemented the information system it currently uses to administer the environmental approvals program. Approvals issued prior to this date are currently stored in boxed paper files, and therefore could not be counted. See **Section 4.1.1** for details. Percentages are based on the 33,800 approvals that have been issued to 28,500 emitters and are still active (i.e., have not been revoked and/or replaced) as of March 31, 2016.

Application Fees

The Ministry charges an application fee for reviewing applications for Environmental Compliance Approvals. The application fee includes a $50–$200 non-refundable administrative processing fee, plus a technical fee that varies depending on the type of application. The application fee can range from $50 for a less complex application, such as for a bio-solids waste transportation system, to $60,000 for a more complex application, such as for a landfill site for hazardous or liquid industrial waste. See **Appendix 1** for the schedule of fees for certain types of activities.

Ministry Review of Application for Environmental Compliance Approvals

Ministry staff first screen the application to determine whether it is complete. A complete application must include, for example, a detailed description of proposed activities, types of emissions, waste characteristics (hazardous or non-hazardous), and pollution control equipment or measures used. Incomplete applications are returned to the applicant.

The *Environmental Bill of Rights* requires that the public be notified (through the online Environmental Registry maintained by the Ministry) of applications for Environmental Compliance Approvals. When the Ministry receives such an application, pertinent details regarding the application are posted on the Environmental Registry for a minimum of 30 days for public comment. Members of the public can submit their comments through the Environmental Registry during this period. The Environmental Commissioner of Ontario comments in its annual report on how well the Ministry has fulfilled its responsibilities regarding the *Environmental Bill of Rights*.

Ministry staff review the application and the related public comments, and prepare a recommendation to either approve the application (with recommended conditions of approval) or refuse it. The Ministry must consider all public input and notify the public of its decision (also through the Environmental Registry), including what impact public comments had on its decision.

The decision is posted on the Environmental Registry, at which time the emitter and members of the public have the opportunity to request a hearing with the Environmental Review Tribunal. The Tribunal is a separate entity reporting to the Ministry of the Attorney General that holds hearings to assess the merits of activities that impact the environment.

Hearings are conducted by a panel of one to three members, and are usually held in-person. The Tribunal's objective is to consider all evidence presented, and make a decision in a manner that is consistent with the Act under which the application is submitted. (Appeals for environmental approvals are submitted under either the *Environmental Protection Act* or the *Ontario Water Resources Act*.) The Tribunal will issue a written decision—to confirm, amend or revoke the Ministry's decision—and the reasons for its decision within 60 days following the hearing. The Tribunal's decision may be appealed to the Minister of the Environment and Climate Change or to the Divisional Court.

Figure 4 provides a breakdown of the number of applications received in the last five years, and the decisions associated with the applications.

Financial Security for Future Clean-Up Costs

Financial security—in the form of cash, letter of credit, securities and/or bonds—must be provided by emitters for all large privately owned landfills that accept municipal waste and for mobile facilities that destroy PCBs (chemicals that are hazardous to human health and are difficult to destroy). For all other activities, the Ministry has discretion over whether to require financial security.

The amount of financial security required by the Ministry varies by the activity. For some activities, the amount is set (for example, $50,000 for a mobile PCB destruction facility). For others, such as landfills, the amount is based on the volume of activity (such as per tonne of anticipated waste).

The purpose of financial security is to ensure that funds will be available to cover future

Figure 4: Breakdown of Applications for Environmental Compliance Approvals

Source of data: Ministry of the Environment and Climate Change

	2011/12	2012/13	2013/14	2014/15	2015/16	Total Over 5 Years
Received[1]	4,361	4,008	3,866	3,504	3,701	**19,440**
Returned[2]	393	311	215	185	265	**1,369**
Cancelled[3]	415	407	341	302	498	**1,963**
Approved	3,506	3,233	2,737	2,795	3,362	**15,633**
New applications[4]	2,045	1,821	1,529	1,466	1,787	**8,648**
Administrative changes[5]	513	494	311	355	443	**2,116**
Amendments[6]	835	814	731	881	995	**4,256**
Revocation and Voluntary Surrender[7]	113	104	166	93	137	**613**
Refused[8]	17	10	18	8	20	**73**
Appealed						
By the emitter	4	5	4	4	4	**21**
By a third party	5	4	6	2	4	**21**

1. Number of applications received approximates caseload and consists of total applications received, including new applications, applications to make administrative changes or major amendments to existing Environmental Compliance Approvals, as well as re-submitted applications that were previously returned to the applicants.
2. Applications are returned to the emitter if incomplete, incorrect or missing the appropriate fee, or if the activity is eligible for self-registration.
3. Applications may be cancelled if the emitter withdraws the application, the emitter does not provide the information requested by Ministry staff, or if the application is merged with or replaced by another application.
4. Refers to first-time applications for an Environmental Compliance Approval for a specific activity.
5. Refers to minor administrative changes to an existing Environmental Compliance Approval to reflect a change in, for example, ownership, company name or hours of operation.
6. Refers to amendments to existing Environmental Compliance Approvals to reflect major changes in operations, such as landfill expansions or the use of new equipment and processes.
7. An existing Environmental Compliance Approval may be revoked if the emitter discontinues the activity for which the approval was issued or if the Ministry finds that the emitter is not operating in accordance with the condition of the approval.
8. The Ministry may refuse to approve the proposed activity if the information provided in the application does not demonstrate that the proposed activity can operate in compliance with the Ministry's requirements.

environmental clean-up costs, such as site remediation, in the event that the emitter is unable or unwilling to do so.

2.3 Post-approval Monitoring by the Ministry

All self-registrations and Environmental Compliance Approvals have legally binding conditions that set out rules of operation. The conditions may include required training and equipment maintenance, the maximum amount of contaminant that can be discharged by the emitter, and pollution control measures that the emitter must take. In many cases, such conditions may also include requirements that the emitters monitor and report their emission levels to the Ministry, usually on an annual basis.

Emitters are also required to inform the Ministry about changes in their operations, such as those that can affect emissions. The Ministry is responsible for monitoring emitters' compliance with these reporting requirements and other conditions of their environmental approvals through desk reviews, field inspections and investigations. **Figure 5** shows the number of desk reviews, inspections and investigations that have been completed by Ministry staff in the last five years.

2.3.1 Desk Reviews of Self-Registered Emitters

In 2013/14, the Ministry began conducting desk reviews as part of its monitoring strategy for self-registered emitters. As of March 31, 2015, the Ministry had conducted such reviews for a sample of emitters in two of the six activities that were eligible for self-registration at that time: automotive refinishing facilities and non-hazardous waste transportation systems.

During desk reviews, Ministry staff request documentation to demonstrate the emitter's compliance with conditions of the self-registration. If the emitter does not provide the information, it is usually referred for a field inspection. A field inspection might also be conducted if the Ministry identifies possible non-compliance based on the information submitted.

Figure 5: Environmental Approval Compliance Monitoring Activities by the Ministry, 2010/11–2014/15
Source of data: Ministry of the Environment and Climate Change

	2010/11	2011/12	2012/13	2013/14	2014/15	Total Over 5 Years
Desk reviews[1]				80	95	**175**
Inspections[2]						
Air/noise	1,166	1,113	881	898	818	**4,876**
Hazardous waste	864	881	807	789	806	**4,147**
Non-hazardous waste	782	684	683	578	579	**3,306**
Industrial sewage	264	314	256	232	247	**1,313**
Private and commercial sewage	282	211	212	246	277	**1,288**
Municipal sewage	162	156	148	98	116	**680**
Sector-based[3]	240	353	391	319	245	**1,548**
Total Inspections	**3,760**	**3,712**	**3,378**	**3,160**	**3,088**	**17,098**
Investigations	478	445	516	492	376	**2,307**

1. Desk reviews of self-registered emitters began in 2013/14.
2. Inspections are done primarily on Environmental Compliance Approvals, and are conducted by local Ministry staff across the province.
3. Sector-based inspections focus on specific business industries, such as large-scale manufacturing or large-scale waste facilities. Also includes inspections of self-registered emitters beginning in 2014/15.

2.3.2 Field Inspections

Field inspections are conducted to determine whether emitters are complying with the conditions of their environmental approvals.

Facilities to be inspected are selected from the Ministry's database of emitters with Environmental Compliance Approvals. Selection criteria are based on compliance history, suggestions from the Ministry's regional and local office staff, the Ministry's priorities and information reported by the emitter that indicates possible violations of the conditions of its approvals. Inspections can also be conducted based on public complaints.

Where inspections identify instances of non-compliance involving potentially serious environmental or health consequences, particularly by an emitter with a history of non-compliance, the emitter is usually referred for an investigation.

2.3.3 Investigations

Investigations are conducted on more significant suspected violations of the *Environmental Protection Act* and the *Ontario Water Resources Act*. The purpose of an investigation is to gather evidence to be used in a court of law to prosecute individuals or corporations suspected of non-compliance with environmental laws. Investigations can result in charges being laid, which can lead to fines or incarceration.

2.4 Ministry's Response to Non-compliance

Ministry policy states that its response to any identified instances of non-compliance must be proportionate to the risk presented. The risk includes consideration of the potential impact on the environment and on health, the emitter's compliance history, and the emitter's responses to the Ministry's direction to take corrective action. The Ministry generally uses the following tools on an escalating basis:

- **Abatement tools** include formal warnings, emitter-developed voluntary abatement plans, suspension or revocation of the environmental approval until the non-compliance is appropriately addressed, monetary penalties issued by the Ministry and control orders (mandatory requirement for the emitter to limit or stop its emissions).
- **Enforcement tools** include tickets and prosecution, which can result in court-imposed fines or incarceration. The legislated maximum fine is $6 million per day (of the violation) for individuals and $10 million per day (of the violation) for corporations. The maximum jail term is five years less one day.

Figure 6 shows the number of times each of the above abatement and enforcement tools has been used in the last five years. The top 10 fines imposed to date by the courts by dollar amount are listed in **Appendix 2**.

2.5 Public Reporting

The Ministry releases on its public website annual Environmental Compliance Reports, which list emitters that the Ministry has identified as having discharged contaminants into the air and water in excess of allowable limits. As of August 31, 2016, the most recent reports on the website are from 2014.

2.6 Provincial and Federal Jurisdiction over Emissions

In Canada, provinces have jurisdiction to regulate emissions from most types of industries, including mining and manufacturing. Provinces are also primarily responsible for managing water resources within their borders, which includes regulating sewage discharges by industries.

The federal government regulates air emissions by industries such as aviation and interprovincial/national transportation. In addition, the *Canadian Environmental Protection Act* requires Environment

Figure 6: Abatement and Enforcement Measures Used by the Ministry, 2010/11–2014/15

Sources of data: Ministry of the Environment and Climate Change and the Ontario Court of Justice

	2010/11	2011/12	2012/13	2013/14	2014/15	Total Over 5 Years
Voluntary abatement[1]	4,545	8,558	6,449	6,542	6,487	**32,581**
Control orders[2]	442	454	372	504	742	**2,514**
Stop orders[3]	–	–	–	–	–	–
Revocation and voluntary surrender of environmental approval[4]	165	113	104	166	93	**641**
Tickets[5]						
# of instances	734	514	408	384	616	**2,656**
Levied by the Ministry ($)	275,855	189,105	153,655	142,265	224,690	**985,570**
Collected by municipalities ($)[6]	290,515	206,900	150,235	141,435	209,055	**998,140**
Environmental penalties[7]						
# of violations	45	42	12	34	21	**154**
Levied by the Ministry ($)	298,034	279,488	94,134	178,488	117,676	**967,819**
Collected by the Ministry ($)	355,414	226,773	96,508	203,979	140,901	**1,023,575**
Prosecution						
# of cases with charges laid	164	167	143	112	74	**660**
# of cases with convictions	156	151	123	73	20	**523**
Fines imposed by the courts ($)	2,132,123	3,646,776	2,296,314	1,377,984	2,453,440	**11,906,637**
Fines collected by municipalities ($)[6]	1,125,042	1,194,936	1,701,596	1,280,086	2,062,585	**7,364,245**
# of cases resulting in incarceration	2	5	4	1	1	**13**

1. Number of voluntary abatements is the number of instances of abatements, not the number of emitters involved (a single emitter may receive multiple abatements).
2. Control orders are issued to require the company to limit or stop its emissions.
3. Stop orders are issued if the source of a contaminant discharging into the natural environment poses an immediate danger to human life and the health of any persons. The Ministry has not issued any stop orders in the last five fiscal years.
4. Revocations include those where the emitter voluntarily discontinues the activity for which the approval was issued and where the Ministry revokes the approval because the emitter was not operating in accordance with the conditions of the approval. The Ministry does not track which approvals are revoked voluntarily versus which the Ministry revokes.
5. Tickets are issued for minor violations and are issued at the time of the offence. Regulations under the *Provincial Offences Act* set fines for each type of offence. The maximum fine is $1,000.
6. Under the *Provincial Offences Act*, fines imposed by the courts are collected by the municipalities. The Ministry does not track fines collected. We obtained the amounts collected from the Ontario Court of Justice. Amounts exclude late payment fees, court cost, victim surcharge and collection agency cost.
7. Environmental penalties are administrative monetary penalties that can be imposed by the Ministry when certain industrial facilities (as specified in regulations) spill or have unlawful discharges to water or land. Penalty amounts range from $1,000 per day for less serious administrative violations (e.g., failure to submit a quarterly report) to $100,000 per day for the most serious violations (e.g., spill with significant impact).

and Climate Change Canada to maintain a National Pollution Release Inventory that provides emitter-specific information for larger facilities regarding the quantity of their emissions for over 300 contaminants. Emitters that use and/or emit these contaminants must report their emissions annually. Environment and Climate Change Canada also has a separate program that monitors outdoor air quality in over 200 communities across Canada through its National Air Pollution Surveillance program. The results of this monitoring are summarized to provide information on the state of pollution within each of five large Canadian regions. Southern Ontario is one such region, with another encompassing Northern Ontario and the Prairies; information on Northern Ontario is not reported separately.

With regard to water resources, the federal government regulates activities related to fisheries, shipping and navigation. This includes regulating emissions from ships and boats, such as sewage, oil and ballast water discharges. The federal government is also responsible for regulating bulk water-taking activities in "boundary waters" (bodies of water that connect Canada and the United States), such as the Great Lakes. Environment and Climate Change Canada monitors the quality of fresh water in areas considered to be of national and international interest such as the Great Lakes-St. Lawrence River Basin, as well as in select rivers throughout Canada. The results of this monitoring are summarized by province.

3.0 Audit Objective and Scope

The objective of our audit was to assess whether the Ministry of the Environment and Climate Change has effective systems and processes in place to:

- ensure that projects that can have a negative impact on the environment and human health are appropriately approved and carried out in compliance with relevant legislation, regulations and Ministry policies, such that negative impacts are prevented or minimized; and
- assess and report on the effectiveness of its environmental approvals program in identifying and mitigating negative environmental effects of projects.

Prior to commencing our work, we identified the audit criteria we would use to address our audit objective. Senior management at the Ministry reviewed and agreed with our objective and related criteria.

Our audit work was conducted primarily at the Ministry's head office in Toronto between November 2015 and May 2016. We also visited three of the Ministry's five regional offices (Central, Northern and Southwest). In conducting our audit work, we reviewed applicable legislation, regulations, Ministry policies and relevant files, and interviewed staff at the Ministry's head, regional and district offices. We also surveyed 190 field inspectors for their views on the environmental approvals program, and received a 42% response rate.

We used data provided by a leading North American business directory that collects the names and locations of businesses in various industry sectors and classifies them by the North American Industry Classification System (NAICS) codes to identify potential emitters that may be operating without an environmental approval. We chose five such sectors—manufacturing, mining and quarrying, waste management, commercial printing, and automotive refinishing—and compared the directory data with the Ministry's records of emitters with environmental approvals. We selected these five sectors because the Ministry had indicated that it had issued approvals to emitters in these sectors.

We met with representatives from the Office of the Environmental Commissioner of Ontario and the Environmental Review Tribunal to obtain their perspectives on the environmental approval process in Ontario.

We interviewed non-government environmental groups such as the Wildlife Conservation Society of Canada, Nature Canada and the Canadian Environmental Law Association, to obtain their perspectives on the environmental approval process in Ontario. We also conducted research on environmental approval processes in other Canadian jurisdictions to identify best practices.

4.0 Detailed Audit Observations

4.1 Emitters Operating with Outdated or No Environmental Approvals

4.1.1 Ministry Issues Approvals with No Expiry or Renewal Dates

Although the *Environmental Protection Act* authorizes the Ministry to impose renewal requirements on environmental approvals, the Ministry has chosen to issue environmental approvals that neither expire nor are required to be renewed periodically. Approvals issued for waste-related activities prior to the late 1970s had expiration dates. However, the Ministry eliminated the expiration dates after concluding that there was no benefit to periodically requiring emitters to reapply to ensure their approvals were consistent with their current operations and with current standards, since emitters are legally required to inform the Ministry when their operations change.

The Ministry does not regularly review existing approvals to ensure they are consistent with current environmental standards. Instead, it relies on emitters to inform it when their approvals need to be updated, such as when they change their operations. However, emitters do not always do so. For example, in the last five years, the Ministry's air-related inspections found that 423 emitters had changed their operations without informing the Ministry. As a result, the Ministry does not know the extent to which emitters are not meeting current environmental standards.

In four Canadian jurisdictions—British Columbia, Alberta, New Brunswick and the Yukon—environmental approvals have expiration dates that range from 15 months to ten years from the date they are issued, which can help to ensure that these approvals reflect current environmental standards.

Over 200,000 Approvals Issued More Than 15 Years Ago Are Outdated

The Ministry did not enter any information about approvals issued prior to 2000 when it implemented its current information system in late 1999. All relevant documentation regarding these approvals is currently stored in boxed paper files in the Ministry's off-site storage facility. Consequently, the Ministry does not know how many emitters are still operating with these old approvals.

According to the Ministry, the data was not entered into the information system due to insufficient staff. Instead, the Ministry has entered certain basic information about the emitter and the related approval only if the emitter makes a significant change in its operations and applies to have its approval amended to reflect the change. However, this process relies on the emitter recognizing that it needs to inform the Ministry about the change, and deciding to voluntarily submit an application to amend an existing approval.

Our 2000 audit of the Ministry's Operations Division noted that the Ministry had issued over 220,000 approvals since 1957. However, as of May 31, 2016, only 12,000 of these approvals have been amended. Many of the emitters that were operating prior to 2000 might have since ceased to operate. However, our review of a sample of these approvals indicates the Ministry should further review these pre-2000 approvals because the Ministry determined, at our request, that over half of the emitters we looked at were still in operation.

Our review indicated these emitters were not operating under many, and in some cases any, of the operational requirements that the Ministry has more recently established to ensure the environment is protected. For example, older approvals did not include any requirements for training of staff, maintaining equipment or obtaining liability insurance. In general, approvals issued prior to 1983 included few, if any, conditions.

The Ministry informed us that it will not take any action to identify and update outdated approvals issued prior to 2000, and will continue to revise

these approvals only if the emitter indicates it has changed its operations or, in some cases, when the Ministry receives complaints about the emitter. The Ministry further acknowledged that while these emitters do not have to operate according to conditions that are standard in current approvals, in its view, it is only important that the emitters comply with their existing approvals.

RECOMMENDATION 1

To ensure that all emitters that have Environmental Compliance Approvals are operating with conditions that are consistent with current environmental standards and their current operations, the Ministry of the Environment and Climate Change should:

- establish guidelines and targets for the timely review and update of existing Environmental Compliance Approvals;
- evaluate the benefits and costs of setting expiry dates on Environmental Compliance Approvals, especially for high-risk activities; and
- ensure its emitter database contains the information needed to support monitoring activities for all emitters, including those approved prior to 2000.

MINISTRY RESPONSE

The Ministry agrees with the Auditor General that environmental approvals should be current and effective at managing risks to the environment from emitters. To this end, the Ministry is committed to the following:

- Evaluating the benefits and costs of setting expiry dates on Environmental Compliance Approvals for high-risk emitters to determine whether this will contribute to better environmental outcomes.
- Initiating an assessment of the risk associated with approvals issued prior to 2000 to determine the need to review all existing Environmental Compliance Approvals. This will include quantifying the number of historic approvals that apply to higher-risk activities.
- Examining whether to include these older approvals in the database.

4.1.2 A Significant Number of Emitters in the Province May Not Have Proper Approvals

Although the Ministry acknowledged to us that it is aware that some emitters operate in Ontario without registering with the Ministry or without the required environmental approval, it has not attempted to determine how many such emitters are currently operating or what risks they pose to the environment. These emitters are not subject to any Ministry monitoring or rules of operation to ensure that their emissions are within allowable limits, and therefore might be causing significant harm to the environment and human health.

In the last five years, the Ministry's field inspections identified over 900 emitters that were operating without environmental approvals. However, our analysis of the data we obtained from a leading business directory that collects the names of businesses for each business sector indicates that there potentially may be about 12,000 emitters in the province that are not in the Ministry's emitter database—over and above the 38,000 that the Ministry currently tracks.

While there may be various reasons why these emitters are not in the Ministry's emitter database—for example, some of these emitters may have an approval that was issued prior to 2000—the Ministry has not performed a similar comparison to identify emitters that may be operating without a proper environmental approval. **Figure 7** summarizes the results of our comparison of the information in the business directory to the list of emitters that have approvals in the Ministry's database or have self-registered.

As described in **Section 2.2**, Ontario currently uses two types of approvals: online self-registration,

Figure 7: Comparison of Emitters Listed in Business Directory with Emitters in Ministry's Database

Prepared by the Office of the Auditor General of Ontario

	Emitters Per Business Directory	Emitters in Business Directory with Approval*	Emitters in Business Directory without Approval #	Emitters in Business Directory without Approval %
Activities for Which an Environmental Compliance Approval Is Required				
Manufacturing				
Established before 2000	10,879	2,137	8,742	80
Established in or after 2000	1,774	159	1,615	91
Establishment date unavailable	994	104	890	90
Total manufacturing	**13,647**	**2,400**	**11,247**	**82**
Mining and quarrying				
Established before 2000	75	24	51	68
Established in or after 2000	8	1	7	88
Establishment date unavailable	16	2	14	88
Total mining and quarrying	**99**	**27**	**72**	**73**
Waste management and remediation				
Established before 2000	118	47	71	60
Established in or after 2000	58	25	33	57
Establishment date unavailable	54	25	29	54
Total waste management and remediation	**230**	**97**	**133**	**58**
Subtotal	**13,976**	**2,524**	**11,452**	**82**
Activities That Are Eligible for Self-Registration				
Commercial printing				
Established before 2000	1,016	47	969	95
Established in or after 2000	161	3	158	98
Establishment date unavailable	92	4	88	96
Total commercial printing	**1,269**	**54**	**1,215**	**96**
Automotive refinishing				
Established before 2000	241	59	182	76
Established in or after 2000	23	4	19	83
Establishment date unavailable	41	10	31	76
Total automotive refinishing	**305**	**73**	**232**	**76**
Subtotal	**1,574**	**127**	**1,447**	**92**
Total	**15,550**	**2,651**	**12,889**	**83**

* Includes only those emitters that were listed in the business directory that were also found to have approvals (either through self-registration or Environmental Compliance Approvals). Numbers do not represent all emitters listed in the Ministry's database, because some emitters with approvals may not be listed in the business directory.

available since 2011 (involving approximately 4,600 lower-risk emitters); and more rigorous Environmental Compliance Approvals, administered under an information system implemented in December 1999 (involving approximately 28,500 higher-risk emitters).

4.1.3 No Mechanisms to Ensure Emitters Obtain Required Approvals

The Ministry's current practices do not ensure that all emitters have obtained the required approvals. Outreach initiatives—such as presentations at industry tradeshows, education and outreach sessions with stakeholders and the general public—rely on emitters realizing they need to obtain the required approvals, or on the public (through complaints) bringing such emitters to the Ministry's attention. As shown in **Appendix 3**, our survey of field inspectors, which asked for their opinion on the key changes that would improve the environmental approvals program, confirmed that the Ministry needs more effective outreach activities to ensure that emitters that require an environmental approval are aware of and fulfil their responsibility to obtain one.

We found, for example, that one waste removal company that was required to obtain an approval to transfer and store hazardous waste knowingly disregarded the requirement for an approval. The Ministry conducted an inspection in 2014 and found that it had transported an estimated 600 bags of asbestos waste and stored them at its site without an environmental approval. The inspector observed that some bags had been left open with asbestos waste visible, and some asbestos waste was found on the surface of nearby soil. Exposure to asbestos occurs through inhalation of fibres in the air, and can cause lung cancer and mesothelioma (a condition characterized by cancer of the thorax, abdomen or the heart). The Ministry immediately required that the asbestos waste be transported and packaged according to its guidelines. The owner told the Ministry that he was aware of the requirement to obtain an approval, but had decided not to obtain one. The owner subsequently decided not to engage in transporting and storing hazardous waste.

In addition, the Ministry largely relies on public complaints to identify emitters that are operating without approvals, which is a reactive, rather than proactive, approach. Specifically, under information-sharing agreements the Ministry has with other ministries and agencies, the Ministry receives information about public complaints received by the other parties. For example, the Ministry of Natural Resources and Forestry forwards complaints it receives about quarry operations, and Environment Canada forwards complaints it receives about contaminant spills. However, public complaints are received only after the emitter is already operating.

The Ministry's inspection planning guidelines state that inspections of waste-management and certain sewage-related activities should include procedures to identify unapproved facilities. Such procedures incorporate the knowledge of staff at local offices. However, no such planning considerations are required for air/noise and industrial sewage emitters.

Furthermore, the Ministry is missing opportunities to more proactively identify emitters without approvals soon after they begin operating. For example, the information-sharing agreements could also require that other ministries forward information about newly registered emitters for the Ministry to follow up with. The Ministry of Natural Resources and Forestry, for example, could inform the Ministry of newly registered quarry operators that the Ministry could check for approvals. We also noted that the Ministry does not have an information-sharing agreement with the Ministry of Government and Consumer Services, which also has information on new businesses, some of which may be required to obtain an environmental approval.

Figure 8: Average Review Time for New Application for Environmental Compliance Approvals

Source of data: Ministry of the Environment and Climate Change

Type of Approval	2011/12		2012/13		2013/14		2014/15		2015/16	
	# of Approvals	Avg. Review Time (Days)	# of Approvals	Avg. Review Time (Days)	# of Approvals	Avg. Review Time (Days)	# of Approvals	Avg. Review Time (Days)	# of Approvals	Avg. Review Time (Days)
Air/noise	706	295	391	455	331	530	426	646	557	662
Industrial sewage	144	154	144	172	134	144	84	237	149	283
Municipal sewage	987	65	1,111	77	1,004	74	897	95	1,014	98
Waste disposal sites	38	336	33	204	18	281	24	456	27	375
Waste management systems	170	61	142	59	42	126	35	197	40	156
Total	**2,045**		**1,821**		**1,529**		**1,466**		**1,787**	
Overall Averages		**155**		**167**		**183**		**272**		**295**

RECOMMENDATION 2

To ensure that all emitters have the required environmental approvals, the Ministry of the Environment and Climate Change should improve its strategy to more proactively identify emitters that are operating without environmental approvals soon after they begin operations.

MINISTRY RESPONSE

The Ministry agrees that it is vitally important to ensure that facilities have the required environmental approvals and agrees with the recommendation. The Ministry will consider other strategies to enhance its process to better identify emitters operating without environmental approvals.

4.1.4 Long Wait for Approval Results in Emitters Operating without Their Emissions Being Monitored

There is no Ministry policy on how long it should take Ministry staff to review applications for Environmental Compliance Approvals. We found that emitters have to wait months or years before receiving an approval, and that approval times have increased over the past five years. Some of these emitters begin operation before approval is obtained. As a result, emissions can go unmonitored and unregulated during this time.

For example, for the 557 air/noise approvals issued by the Ministry in 2015/16, it took an average of 22 months between receiving the application and issuing the approval. The 2015/16 application process was 125% longer than in 2011/12 for these approvals. At that time, when 706 applications were approved, the Ministry's review took an average of less than 10 months. **Figure 8** shows the number of approvals issued in the last five years and the average review time for these approvals.

Figure 9: Application Review Caseloads, 2011/12–2015/16
Prepared by the Office of the Auditor General of Ontario

	2011/12	2012/13	2013/14	2014/15	2015/16
Total number of applications reviewed[1]	4,331	3,961	3,311	3,290	4,145
Number of staff[2]	92	95	93	93	93
Average number of applications reviewed per staff	47	42	36	35	45

1. Includes applications for new Environmental Compliance Approvals, applications to make administrative and major amendments to existing Environmental Compliance Approvals, and applications to revoke existing Environmental Compliance Approvals.
2. Excludes management and support staff.

The Ministry informed us that the primary reason for the lengthy review time is insufficient staff. However, as shown in **Figure 9**, the number of applications reviewed by staff have actually decreased slightly in the last five years. As of March 31, 2016, the Ministry was in the process of reviewing 1,200 approval applications, about 40% of which it received more than two years earlier. The Ministry had not yet begun reviewing approximately 1,600 applications, about 40% of which it received more than six months prior.

Our survey of inspectors (see **Appendix 3**) indicated that addressing the long wait to issue an approval was one of the areas where improvements are needed. For example, one respondent stated that "staff cannot tell a company to put off production until an [approval] has been issued. Especially, when [they] know it will take 1-2 years to review the application.... Companies that have compliance issues, i.e., elevated noise, air discharges, effluent, etc. know this game well. As long as an application is submitted, they know the Ministry will be off of their backs. So there are many examples where companies will knowingly submit a poor application...." As shown in **Figure 4**, over 1,300 applications for Environmental Compliance Approvals have been returned in the last five years, some due to incomplete information.

RECOMMENDATION 3

To ensure that all emitters that apply for Environmental Compliance Approvals obtain and are operating with the required approvals containing conditions that are consistent with current environmental standards and their current operations, the Ministry of the Environment and Climate Change should:

- establish targets to ensure the timely review of environmental compliance approval applications; and
- monitor performance and staffing to ensure these targets are achieved.

MINISTRY RESPONSE

The Ministry agrees that there should be timely reviews of environmental compliance approval applications.

The Ministry is implementing measures to reduce review times for air and noise approvals by 50% by fall 2017 as well as establishing targets for service standards to fulfill the commitment made in the Fall Economic Statement. These measures include hiring temporary resources to clear the backlog of environmental approval applications and making changes to the way the program is delivered. Since August 2015, the Ministry has reduced the number of applications waiting for an air and noise environmental approval by over 25%. In January 2017, the introduction of the proposed Air and Noise Emissions self-registration will result in 70% fewer air and noise Environmental Compliance Approvals, resulting in time and cost savings for businesses across Ontario. This will enable the Ministry to focus attention on complex and high-risk facilities and ensure more timely review of environmental compliance approval applications.

In addition, the Ministry has recently established an internal tracking system to continually monitor and update the program as required. As part of performance monitoring, the Ministry's database system is being upgraded to better track the time taken in different stages of the approvals process to monitor performance and ensure targets are being achieved.

4.2 Ministry's Environmental Monitoring and Enforcement Insufficient to Deter Violations

The Ministry's monitoring efforts are not sufficient to prevent and detect non-compliance. Furthermore, while the Ministry's enforcement efforts result in short-term compliance with approvals, its enforcement approach is not sufficiently punitive to ensure continued compliance. As a result, emitters violate environmental approval conditions repeatedly, with a negative impact on the environment and human health.

4.2.1 Ministry Does Not Analyze Risks Posed by Individual Emitters

Ministry policy does not prescribe the frequency with which emitters should be subject to desk reviews (which are only conducted on self-registered emitters) or inspections (conducted on all emitters). Staff at the Ministry's regional offices perform ongoing analysis of the results of past inspections in order to identify sectors that are at higher risk of non-compliance. This sector-based approach results in many emitters not being inspected for many years because they are not in higher-risk sectors.

The Ministry's emitter database has information about the emitters' location, inspections and public complaints. However, the Ministry does not compile such emitter-specific information to form risk profiles for individual emitters. Therefore, the Ministry does not have assurance that the lack of monitoring of these emitters is justified, because it does not have information regarding the risks posed by individual emitters.

Fewer than 10% of Self-Registered Emitters Reviewed or Inspected

For the most part, the Ministry relies on self-registered emitters to monitor their own compliance with the conditions of their registrations. Desk reviews of self-registered emitters began in 2013/14—two years after the implementation of the registration process; follow-up inspections began in 2014/15. As of March 31, 2015, only about 5% of the more than 3,500 self-registered emitters had been subject to a desk review or inspection.

The results of Ministry desk reviews and follow-up inspections indicate a need for closer Ministry oversight, especially in these first few years of the registration process.

- In 2014/15, the Ministry inspected 63 automotive refinishing facilities based on the results of desk reviews it conducted the previous year. In 86% of these inspections, the Ministry found that the emitters were either not eligible to self-register or did not comply with one or more operational requirements. For example, over one-fifth of the facilities were not eligible to self-register—and therefore, needed to apply for an Environmental Compliance Approval—because they did not meet the requirement for the minimum distance between the emitter and areas where people would be exposed to the noise and emissions from the facility. In other cases, facilities did not meet operational requirements, such as maintaining records of emission levels or equipment maintenance.
- In 2014/15, the Ministry completed desk reviews of 89 non-hazardous waste transportation systems and found—through its review of activity logs submitted by emitters—that 42% of the emitters did not comply with one or more operational requirements. For example, one review determined that an emitter that registered its operations in 2013

was not only transporting hazardous waste, but was also operating a waste disposal site, which requires an Environmental Compliance Approval. In addition, the emitter was storing the hazardous waste in a warehouse for over three months. These activities disqualify the emitter from the less rigorous self-registration process and indicate a need for Environmental Compliance Approvals. In 2015/16, the Ministry began follow-up inspections of some of these emitters to determine if they are eligible for self-registration or are non-compliant, but the results were not yet available at the time of our audit.

The *2010/11 Annual Report* of the Environmental Commissioner of Ontario similarly noted regarding the nature of the registration system that "the reliance on proponents to self-assess the [eligibility] of their activities and monitor their own compliance with regulatory requirements demands a higher level of ministry oversight."

Our survey of Ministry inspectors indicated that many had concerns regarding the self-registration system. For example:

- One respondent stated that from their experience, "those who require registration in lieu of an Environmental Compliance Approval have met fewer of the conditions of operations that are required of them.... Moving more companies to the [registration process] could lead to less overall compliance within the regulated community."
- Another respondent stated that "the new [registration process] is putting even more onus on companies to regulate themselves—which we know they don't do."

Inspection Cycle Too Long Despite High Rate of Non-compliance by Emitters with Environmental Compliance Approvals

In each of the last five years (from 2010/11 to 2014/15), the Ministry has inspected about 10% of the emitters with Environmental Compliance Approvals, tracked by its information system. It uses a broad risk-based approach informed by the results of past inspections, but one that does not identify risks posed by individual emitters. In 2014/15, 230 inspectors inspected approximately 3,000, or about 9%, out of approximately 33,400 emitters that were known to the Ministry at that time. Given this inspection rate, it will take the Ministry more than 11 years to inspect every emitter with an Environmental Compliance Approval.

While the Ministry's risk-based approach provides some assurance that many higher-risk emitters will be inspected in a timely manner, an 11-year inspection cycle may result in lengthy, undetected non-compliance. We further noted that 80% of the 32,500 emitters that were issued an approval since 2000 have never been inspected. Although many of the approvals were issued more recently, our survey of Ministry inspectors indicated the need for earlier inspections. For example, one respondent stated that "most [emitters] usually have no clue what they are required to do as a result of the approval. By the time we inspect them, they are sometimes years behind on their record-keeping or reporting requirements. If we were able to go through the approval with them when they first get it, it would save a lot of trouble down the road for inspection purposes."

Results of the Ministry's annual inspections indicate high non-compliance rates, and therefore the need for more frequent inspections. For example, in the last five years, 20% of 4,147 hazardous-waste-related inspections, 35% of 4,876 air-related inspections and 47% of 1,228 sewage-related inspections identified non-compliances with possible environmental or health consequences. Specifically, Ministry inspections conducted in 2014/15 found that the top three air contaminants for which emitters were found to exceed the Ministry's standards were all cancer-causing. They were Benzo(a) pyrene, Benzene and suspended particulate matter, and each has been classified by the International Agency for Research on Cancer as "Group 1 carcinogens," meaning that there is "sufficient evidence to conclude that these substances can cause cancer in humans."

RECOMMENDATION 4

To ensure that all self-registered emitters and emitters with Environmental Compliance Approvals, particularly those that pose the highest risk to the environment, are appropriately monitored and non-compliance issues are identified and corrected on a timely basis, the Ministry of the Environment and Climate Change should:

- gather and record data in its information system to support the identification of all high-risk emitters; and
- revise its risk-based policy to include requirements on how frequently to review and inspect these emitters and ensure that the policy is followed.

MINISTRY RESPONSE

The Ministry agrees with the Auditor General's recommendation and will modernize its compliance system to enable the more effective use of risk-based processes. This will assist in ranking facilities to ensure Ministry resources are allocated to address the highest-risk sites.

The Ministry is committed to enhancing its efforts and resources toward regularly inspecting emitters that pose the highest risk to the environment and ensuring that the policy is being followed by staff.

4.2.2 Ministry's Enforcement Measures Do Not Deter Repeat Offenders

Despite the high rate of non-compliance identified through inspections, the Ministry relies on emitters to voluntarily comply with the conditions of their environmental approvals, and often does not impose stringent enforcement measures, such as control orders or the laying of criminal charges. While some emitters do voluntarily comply with the conditions of their approval after an inspection, many subsequently re-offend. For example:

- Over 40% (287) of the 659 emitters that were found—either through Ministry inspections or self-reporting by the emitter—to have exceeded the contaminant or pollutant limits from 2010 to 2014, did so on more than three occasions during those years. Together, the 287 emitters accounted for 96% of the approximately 17,500 reported instances of emitters exceeding contaminant or pollutant limits. These contaminants were mostly suspended particulate matter, suspended solids and total ammonia nitrogen. Suspended particulate matter is a complex mixture of fine solid and liquid particles that can cause respiratory problems if inhaled. Suspended solids consist of floating organic and inorganic particulates, which, if untreated, affect water quality. Total ammonia nitrogen at high concentrations can be toxic to fish.
- In 2014/15, for over 300 air-related inspections in which the Ministry identified violations with possible environmental or health consequences, 44% (107) involved repeat offenders. For 74 of the 107 repeat offenders, the Ministry used voluntary abatement measures.

We also found that penalties levied by the Ministry often did not deter repeat offenders. Nineteen of the 55 emitters that were issued penalties from 2009 to 2016 were issued penalties for more than three violations. One of them was issued penalties for 24 violations in eight of the last nine years, totalling more than $173,000. Another emitter was issued penalties for 13 violations in seven of the last nine years, totalling more than $192,000.

The Ministry informed us that the purpose of a penalty is to encourage companies to comply with environmental regulations and take swift remedial action in the event of a spill, unlawful discharge or other environmental violation. The *Environmental Protection Act* requires the Ministry to review its penalty program every five years. The Ministry's 2012 review analyzed penalties that were issued from 2007 to 2011, focusing on the types

of violations and the sectors in which violations occurred. However, the review did not assess the effectiveness of penalties in deterring repeated violations by individual emitters.

In its *2013/14 Annual Report*, the Environmental Commissioner of Ontario criticized the Ministry's "soft approach" to enforcement, stating that "there must be a credible threat of stronger measures to ensure that the regulatory regime is respected. An over-reliance on a soft approach can create a perception that the Ministry does not take enforcement seriously, which can allow a culture of non-compliance to develop."

RECOMMENDATION 5

To ensure that all emitters, particularly those that pose the highest risk to the environment, are appropriately monitored, and that its system of penalties is effective in correcting non-compliance issues on a timely basis, the Ministry of the Environment and Climate Change should:

- assess, as part of its ongoing reviews of its penalties program, how effective its penalties are in discouraging individual emitters from being non-compliant with environmental regulations;
- establish a clear progressive penalty policy and process for dealing with repeat offenders; and
- take swift remedial action in the event of a violation.

MINISTRY RESPONSE

The Ministry agrees that penalties need to be an effective deterrent toward reducing environmental infractions.

The Ministry will assess its actions in relation to individual repeat offenders based on their compliance history and environmental and health consequences, and take appropriate action consistent with our policies.

For repeat offenders, the Ministry implements mandatory abatement measures to ensure the appropriate environmental enforcement activities are in place. The Ministry agrees with the Auditor General's recommendation and will consider assessing whether these tools are effective in discouraging individual companies from being non-compliant with environmental regulations.

4.3 Cost to Support Environmental Approvals and to Clean Up Contamination Not Fully Recovered from Emitters

4.3.1 Financial Security Not Required for Many High-Risk Activities

Regulations under the *Environmental Protection Act* require financial security only for large privately owned landfills that accept municipal waste, and for mobile PCB destruction facilities. Financial security is determined based on a technical review by the Ministry's engineering and financial staff, which considers the likelihood of an emitter's activities resulting in future contamination, and the timing and associated costs of clean-up. This assessment assumes that the emitter will not violate the conditions of its approval, for example, that a landfill operator will not exceed the maximum set amount of allowed waste.

Ministry policy further states that financial security should normally be required for other private-sector waste management operations, such as recycling operations, tire storage and disposal facilities, waste-burning facilities, and certain types of private sewage systems. However, neither the regulations under the Act nor Ministry policy require financial security for several other high-risk activities such as hazardous waste transporters, industrial sewage systems and activities that can result in contaminant spills. The Ministry can use its discretion to require financial security for such activities; however, it does not always so. **Figure 10** presents a case study of groundwater contamination in the Bishop Street community in

Figure 10: The Importance of Financial Security for Future Clean-Up
Prepared by the Office of the Auditor General of Ontario

Case Study: Groundwater Contamination in the Bishop Street Community

679/695 Bishop Street North, Cambridge

679/695 Bishop Street North in Cambridge is the former site of a facility that manufactured helicopter and aircraft parts. Northstar Aerospace (Canada) Inc. (Northstar) and its predecessors operated at the site since about 1981. The Ministry did not require any financial security from Northstar when it issued environmental approvals. Northstar stopped operating at the site in 2012.

Groundwater Contamination and Remediation Efforts

In 2004, Northstar decided it wanted to sell the property and so was required to perform environmental site assessments. These assessments indicated the presence of two substances that can lead to cancer (trichloroethylene (TCE) and hexavalent chromium) in the soil and groundwater at concentrations well above Ministry standards at the time, and that the contamination was possibly flowing off-site. The contaminants were a by-product of Northstar's manufacturing operations. TCE is commonly used as a metal degreaser, and can migrate through soil and water and into air indoors.

In 2005, groundwater samples from wells located in a residential area southwest of the facility—now referred to as the Bishop Street Community—contained up to 4,000 parts per billion of TCE, or 80 times the Ministry's standard of 50 parts per billion at the time. The off-site contamination led to the air in homes being contaminated at levels that require monitoring due to possible adverse health effects.

From 2004 to 2012, Northstar carried out groundwater and indoor air quality monitoring and mitigation efforts at the facility and in the Bishop Street Community. This was the largest known program of its kind in Canada. The Ministry received annual reports on the results of this monitoring.

Northstar Bankruptcy

In February 2012, Northstar announced that it had begun foreclosure agreements with its lenders, signalling financial difficulties. On May 31, 2012, the Ministry issued an order requiring Northstar to provide financial security of approximately $10.4 million by June 6, 2012. Northstar never complied with the order.

Northstar did not have the funds to satisfy the Ministry's order. On June 14, 2012, it obtained protection under the *Companies' Creditors Arrangement Act*. On August 24, 2012, the company went bankrupt, and all its remediation activities at the facility were discontinued.

On October 23, 2013, a group of former Northstar directors and officers reached a settlement with the Ministry, wherein they would provide $4.75 million of the estimated $15 million in clean-up costs.

After the settlement was reached, the Ministry stepped in to continue to operate, monitor and maintain the groundwater and residential indoor air quality mitigation systems established by Northstar. To date, the Ministry has spent over $2 million to monitor and mitigate the contamination, and estimates that over $35 million more will be needed in the next 30 years. The Ministry expects that monitoring and mitigation work will be required beyond the next 30 years.

Cambridge, Ontario, that demonstrates the importance of requiring financial security for all high-risk activities.

In 2012, the Ministry began reviewing its financial security policies to address deficiencies with the objective of strengthening the polluter-pays principle and reducing the government's liability with respect to clean-up of contaminated sites. While the Ministry has still not completed its review four years after starting the review, it is considering expanding the financial security requirements to activities that pose potentially significant risks, such as industrial sectors, underground petroleum storage tanks, and operations involving high-risk substances and new technologies. The Ministry's review also highlighted the need to have similar financial security requirements for all types of hazardous waste management systems similar to what are currently in place for PCB and biomedical waste transporters.

In this regard, we noted that all hazardous-waste-processing facilities in Quebec are not only required to provide financial security but must also have environmental liability insurance. Currently, in Ontario, environmental liability insurance is only required for waste transporters, which is similar to the situation in Alberta, British Columbia, Saskatchewan and Newfoundland. Contamination caused by emitters' activities can cause significant and long-lasting damage to the environment and pose serious health risk to the public. The Ministry may ultimately be responsible for cleaning up such contamination if the emitter fails to do so. In fact, as we noted in our 2015 audit of the Province's management of contaminated sites, the Province is currently responsible for cleaning up over 100 contaminated sites at an estimated cost of approximately $1.5 billion. Contamination at these sites was the result of commercial/industrial, landfilling and waste management, and mining activities, many of which require environmental approvals.

RECOMMENDATION 6

The Ministry of the Environment and Climate Change should complete the review of its financial security policies, and ensure that financial security and/or environmental liability insurance is required for all activities that pose significant risks to the environment.

MINISTRY RESPONSE

The Ministry agrees that financial security needs to be representative of the environmental risk posed by the facility.

Ontario has one of the most broadly based financial security approaches in Canada. Based on the Ministry's review of the financial security program, the Ministry will look at practical improvements that can be implemented, including the expanded use of financial security.

4.3.2 Financial Security Either Insufficient and/or Uncollected

The Ministry's emitter database is intended to track the emitters from whom financial security is required, the amount the Ministry has required from the emitter, and the amount held by the Ministry. As of March 31, 2016, the Ministry's emitter database indicated that $442 million in financial security has been required from about 1,000 emitters, and that only $6 million had not been collected by the Ministry.

Our audit found that, in some cases, the amount that the Ministry has required from the emitters—as recorded in the Ministry's emitter database—is not sufficient for future clean-up.

The Ministry's own review of its financial security policies confirmed that financial security is "never sufficient to pay for clean-up." This conclusion is based on the Ministry's experiences, such as with emitters handling more waste than their financial security was intended to cover. For example:

- The Ministry collected $25,000 in financial security for a waste removal operation, but the actual cost of clean-up was $17 million (or 680 times the amount collected).
- The Ministry collected $38,000 in financial security for another waste removal operation, but the actual cost of clean-up was $1.2 million (or over 31 times the amount collected).

In other cases, the Ministry indicated that additional clean-up costs resulting from unusual events, such as fires or explosions (since, for example, the emitters work with chemicals that can be flammable) were not accounted for in the calculation of financial security.

Security Amounts Collected from Some Emitters Less Than Estimated Future Clean-Up Costs

Our review of a sample of emitters indicated that the Ministry has collected approximately $10 million less than what the Ministry estimated would be required for future clean-up. This is over and above the $6 million that Ministry records indicate as outstanding. In some instances the Ministry reduced the amount of security required from the emitter due to reservations about the emitter's ability to pay the estimated clean-up cost. For example:

- In 1990, the Ministry issued an approval for a waste disposal site, and required the emitter to provide less than two cents in financial security for every litre of waste it received at the site. The Ministry had received $67,600 by 2004. The emitter appealed the financial security requirement, stating that providing the amount would "tie up capital that it would otherwise be using to run its business." As a result, the Ministry agreed that the emitter could set up a "special bank account" where the emitter could deposit the required security in instalments. This arrangement is still in place. However, the Ministry does not have access to the account.

  In 2012, a Ministry inspection found that the emitter was not funding the bank account as required. In 2013, the security requirement was re-evaluated, and the actual amount required for future clean-up was increased to approximately $5.1 million, which the Ministry has not requested. Similar to its 1990 approach to the situation, the Ministry noted that "should [the emitter] contend that providing the security amount will bankrupt or severely inhibit its ability to operate, the Ministry is willing to work with the company on an acceptable payment schedule."

  The Ministry had periodically approached the emitter—in 1998, 2001 and 2010—to secure the required financial security through means that comply with current Ministry policy, but the emitter stated that it would appeal any decision eliminating the special bank account.

  In 2014, the Ministry found—through a review of the emitter's own reporting—that the site was contaminated with a toxic substance in the soil and groundwater exceeding standards by up to 1,000 times. Two years later, at the time of our audit, the emitter was still conducting additional studies to confirm the exact nature and extent of the contamination. At the time of our audit, the Ministry indicated it planned to update the financial security agreement by revising terms and conditions of the Environmental Compliance Approval. As of April 2016, there was only $133,000 in the special bank account.
- In 2014, the Ministry estimated future clean-up costs for a steel manufacturing operation at $977,000. Concerns about the financial health of the company led the Ministry to require only $743,000, or 75% of the estimated clean-up costs. The Ministry's emitter database reflects the reduced financial security, and not the full estimated future remediation cost. The Ministry informed us that it issued the Environmental Compliance Approval at the lesser amount because it wanted to issue

the approval as quickly as possible while the company was still viable.

Due to limitations in the Ministry's financial security database, it could not determine the number of cases where it has sought a lesser amount of financial security because of concerns regarding the emitter's ability to provide sufficient financial security to cover estimated clean-up costs.

Financial Security Amounts Not Periodically Re-evaluated

Because financial security is often collected many years before it needs to be spent on remediating contaminated sites, the Ministry needs to periodically re-evaluate the amounts to ensure they are sufficient. Ministry policies do not state how frequently such reviews should be conducted. The fixed financial security amounts for about one-fifth of the approximately 1,000 emitters with financial security requirements—such as mobile PCB destruction facilities, as well as PCB and biomedical waste transporters—were established in the 1980s and have not been updated. Our review of the results of re-evaluations (for a sample of emitters with financial security requirements)—conducted by the Ministry between 2005 and 2016—confirmed their importance. In two-thirds of cases where the security amounts had been re-evaluated, the amount at least doubled from the previous estimate. In fact, in one-fifth of cases, the amount increased by at least 10 times the initial estimate. For example:

- A paper mill's estimated remediation costs increased from $10,000 in 2004 to $487,000 in 2016 (almost 50 times the previous estimate).
- A landfill site's estimated remediation costs increased from $247,000 in 2002 to $4.3 million in 2009 (more than 17 times the previous estimate).

RECOMMENDATION 7

To ensure that it does not bear the future financial costs of cleaning up contamination caused by emitters whose activities it has approved, the Ministry of the Environment and Climate Change should:

- revise its financial security policies so that all financial security amounts are regularly re-evaluated to ensure they accurately reflect future remediation costs;
- update its emitter database so that it:
  - includes all current estimated remediation costs;
  - reconciles the financial security collected with the estimated costs; and
  - indicates the last date the security was re-evaluated; and
- collect the financial security deemed necessary for clean-up from all emitters required to provide it.

MINISTRY RESPONSE

The Ministry appreciates the Auditor General's recommendation and, in response:

- The Ministry will consider re-evaluating fixed financial security amounts.
- The Ministry agrees that it needs to improve its financial security database and is currently updating this database to better track and report on financial security.
- The Ministry will seek to collect from all emitters that are required to have financial security the amount that is estimated to be necessary for future clean-up. Financial security estimates do not include clean-up costs resulting from unexpected events, such as fires or explosions. Also, at times, the Environmental Review Tribunal may approve financial security amounts that the Ministry is bound by, and it is therefore unable to collect amounts over those awarded.

4.3.3 Fees Recover Only 20% of $23 Million in Costs to Administer the Approvals Program

In 2012/13, the Ministry established a goal for the approvals program to achieve full-cost recovery by spring 2014 from fees collected. However, the Ministry currently recovers only 20% of its costs of administering the environmental approvals program. For example, in 2014/15, the Ministry spent over $23 million to deliver the environmental approvals program, but collected only $4.8 million in related registration and application fees.

We noted that application fees have not been updated since 1998. In addition, the $23 million spent on program administration does not include enforcement costs such as inspector salaries and other costs incurred to ensure emitters' compliance with their approvals. In 2014/15, the Ministry spent approximately $100 million for compliance activities for all its programs, a significant portion of which was for the environmental approvals program. When enforcement and compliance expenditures are included, the Ministry's overall rate of recovering its administration costs through fees is significantly less than 20%.

The 2012 Commission on the Reform of Ontario's Public Services (known as the Drummond Report) also noted that existing fees have not kept pace with the rising costs of program delivery. The Commission recommended that the cost burden of providing environmental programs should be on the emitters rather than the public. In line with this recommendation, emitters in British Columbia are also charged low application fees but must also pay a further ongoing fee that is based on how much they emit.

RECOMMENDATION 8

To ensure that the Ministry of the Environment and Climate Change (Ministry) recovers the costs of administering the environmental approvals program, the Ministry should:

- determine its cost of administering the environmental approvals program, including costs incurred to monitor and enforce compliance; and
- establish appropriate registration and application fees based on the total cost of administering the program.

MINISTRY RESPONSE

The Ministry agrees with the Auditor General's recommendation to establish fees based on the total cost of administering the program.

The Ministry has undertaken a review of the self-registered emitters' fee and is introducing a new fee structure in December 2016. Based on updated revenue forecasts, it is expected that the new fees may result in revenue reaching approximately 79.6% of total program costs by March 2021.

The Ministry is committed to reviewing the environmental compliance approval fees, and will undertake this review once it has modernized the program and introduced electronic service delivery and service standards. The Ministry wants to ensure that it has improved its service delivery before it increases fees to the regulated community.

4.4 Public Not Well Informed about Activities That Cause Pollution

4.4.1 Public Has No Opportunity to Comment on Self-Registered Emitters

In most cases, the Ministry must post the details of individual applications for Environmental Compliance Approvals on the Environmental Registry to inform and give the public an opportunity to comment on proposed polluting activities in their neighbourhood. However, such public consultation is not required if the proposed activity is eligible for self-registration. Public consultation is only conducted on the regulation that sets out activities

eligible for self-registration. At this stage, the public does not have the information regarding the potential location and operational details of these individual emitters. As a result, the public does not have an opportunity to comment on many potentially environmentally harmful activities before emitters begin to operate.

There are currently over 4,600 self-registered emitters. The number is expected to increase as the Ministry adds more sectors to the list of those eligible for self-registration, and reduces those required to obtain Environmental Compliance Approvals. The Ministry is currently evaluating 10 more sectors as potential candidates for the registration stream, including agri-business operations, commercial/institutional facilities, manufacturing operations and land development. Therefore, an increasingly large portion of emitters will be operating without being subject to any prior public consultation.

RECOMMENDATION 9

To ensure that the emitting activities eligible for self-registration are a low risk to Ontarians and the environment, and to justify the lack of opportunity for the public to have input regarding the acceptability of such activities before emitters begin operations, the Ministry of the Environment and Climate Change should regularly review whether the risk posed by such activities is indeed low. Such a review should include an evaluation of complaints from the public to better understand the risks of these activities.

MINISTRY RESPONSE

The Ministry appreciates the Auditor General's recommendation and will consider evaluating complaints to ensure the risks posed by the Environmental Activity and Sector Registry activities are indeed low.

The Ministry reviews the risks posed by new sectors made eligible by the Ministry for self-registration. This analysis includes a risk assessment of the compliance history for the sector as well as operational risks. The Ministry reserves the right of deregistering a facility or a sector if it is determined to be higher-risk, in non-compliance, or has a poor compliance history.

4.4.2 Publicly Available Emitter Database Is Incomplete and Not Functioning as Originally Intended

The 2010 amendments to the *Environmental Protection Act* required the Ministry to publish information about Environmental Compliance Approvals issued after October 31, 2011. In 2011, the Ministry implemented Access Environment, an online database that contains the name and location of emitters that have been issued environmental approvals. Access Environment displays a copy of either the registration for self-registered emitters or the Environmental Compliance Approval, the issuance date and whether the environmental approval is active or has been suspended or revoked.

Access Environment is intended to enable members of the public to access emitter information in their local area. However, this database is not user-friendly and will not perform searches for most basic information that the public is concerned about, such as searching for emitters by name or by postal code.

The information in the database is also incomplete:

- The database contains information only about emitters that have been issued environmental approvals since December 1999 (the last 16 years). Therefore, the public does not have access to any information about the thousands of other emitters that were granted approvals prior to December 1999. As noted in **Section 4.1.1**, our audit confirmed that some of these emitters continue to operate, but the Ministry does not have information on how many.

- The public cannot access the emitters' history of compliance with conditions of their self-registration or Environmental Compliance Approval. Although the intent of database is to provide emissions information, the public cannot access such information about particular emitters.

RECOMMENDATION 10

To enable the public to access relevant information about all emitters, the Ministry of the Environment and Climate Change should:

- ensure all emitters that have self-registered are included in the Access Environment database;
- ensure that all emitters with Environmental Compliance Approvals, including those that were issued Environmental Compliance Approvals prior to 2000 and are still operating at sites, are also included in the Access Environment database; and
- make necessary changes to the Access Environment database to enable members of the public to readily obtain complete and relevant information about all emitters, including the emitter's history of compliance with conditions of their self-registration or Environmental Compliance Approval.

MINISTRY RESPONSE

The Ministry agrees with the Auditor General's recommendation and will be addressing performance and accessibility issues with Access Environment by implementing the required fixes by the end of November 2016.

Through Access Environment, members of the public will have access to relevant information on all self-registered activities as well as Environmental Compliance Approvals issued or amended after 2000.

The Ministry does not plan on inputting approvals issued prior to 2000 on Access Environment for the following reasons:

- some approvals have obtained an amendment after 2000 that will appear on Access Environment; and
- access to all Ministry-issued environmental approvals can be obtained by members of the public by contacting their local Ministry district office.

The Ministry does not believe there is a need for changes to Access Environment, as the Ministry currently produces and posts Court Bulletins for all emitters with Part 3 *Provincial Offences Act* convictions under environmental legislation (that is, fines) on the Ontario Newsroom website. In addition, all information regarding emitters' compliance history is available in Ministry district offices.

AUDITOR GENERAL RESPONSE

To ensure that the public is provided with complete and readily accessible information on emitters, we continue to recommend the Ministry include information on emitters' history of compliance with conditions of self-registrations and/or Environmental Compliance Approvals in the Access Environment database.

4.5 Public Complaints Not Well Managed

In the last five fiscal years, the Ministry received approximately 78,000 reports of contaminant spills and public complaints about emitters that were potentially violating environmental laws and causing harm to the environment and human health. The Ministry has a dedicated unit of approximately 20 staff who receive and co-ordinate responses to public complaints. After a preliminary assessment, complaints are forwarded to the appropriate local Ministry office for follow-up. We found that the Ministry does not consistently track the timeliness of its response to complaints. The Ministry also does not track and analyze public complaint information to identify systemic issues about emitting

activities. We reviewed the Ministry's complaints data and found:

- While most complaints were followed up on in a reasonably timely manner, over 1,800 complaints—including 265 from 2010/11—had not yet been assigned to a Ministry field inspector for follow-up. For example, the Ministry received a complaint in September 2011 about a local scrap yard releasing refrigerant into the air. Refrigerants contribute to the depletion of the ozone layer. The Ministry's complaint log indicated that the Ministry was aware of the emitter's history, including an earlier complaint about the facility burning tires. At the time of our audit, the complaint had not been assigned for follow-up. The Ministry indicated that such complaints were sometimes not followed up on in a timely manner due to a lack of staffing.
- About 900 complaints, which the Ministry had preliminarily assessed and so were determined to warrant a field inspection, had not yet been followed up on. In many cases, the Ministry had documented that a site visit was warranted, but these had not been conducted. For example, the Ministry received a complaint in March 2012 from a caller—who was an employee of the emitter—reporting petroleum odours during excavation work. The caller, who requested a follow-up call to discuss the concerns, indicated that the soil may be contaminated based on the odour, and voiced concerns about whether it was appropriate to take excavated (and potentially contaminated) soil to a landfill. The Ministry determined that a field visit was needed, but no updates have been logged since. In another instance, in January 2011, a caller from a school reported a strong tar smell from a nearby building, which caused the school to move its staff and students to another building. The call was redirected to a field inspector when the complaint was received, but no updates have been logged since.

Complaints are one of the few ways the Ministry obtains information on violations of environmental laws and regulations. Complaints can also provide valuable information regarding concerns associated with self-registered activities. Analyzing this information is particularly important since the public does not otherwise have an opportunity to provide comments about these emitters.

RECOMMENDATION 11

To ensure public concerns on the environmental approvals program are adequately addressed, the Ministry of the Environment and Climate Change should:

- follow up on all public complaints on a timely basis;
- categorize complaints by their underlying issue; and
- take corrective action to address any systemic issues identified.

MINISTRY RESPONSE

The Ministry agrees that timely follow-up on complaints received by members of the public is critical.

The Ministry is developing a new risk-based approach to public complaints that will set out target response times and a tiered approach to incidents and complaints received by the Ministry. This will ensure that the Ministry's resources target significant risks and environmental concerns, and may include alternative forms of response for lower-risk complaints.

The Ministry will continue to use data analytics to assess incidents and complaints, and to identify underlying systemic issues to ensure timely completion of incident documentation. This includes enhanced analysis of pollution incident and spill reports to ensure that timely and effective responses have been provided for all of these reports to the Ministry.

4.6 Ministry Does Not Know If Environmental Approvals Effectively Regulate Pollution or Cumulative Impact of Emissions on Human Health

The Ministry does not have sufficient environmental and health data to determine the cumulative impact of the emissions it approves on the environment and human health. The Ministry has other programs that regularly monitor the state of the province's water and air quality, but it does not assess the results of these monitoring programs in conjunction with environmental approval activities to determine the effectiveness of environmental approvals in controlling pollution. While the Ministry tracks known contaminated sites throughout the Province, it does not have any programs that regularly monitor the impact of polluting activities on the land, such as from chemical spills.

The most recently available air quality data from Environment and Climate Change Canada indicates that, in 2013, Southern Ontario had one of the lowest levels of volatile organic compounds compared to the other four regions in Canada, but it ranked highest in sulphur dioxide emissions, and second highest in fine particulate matter emissions. (Volatile organic compounds are gases emitted from thousands of different products, including paints, varnishes and certain cleaning products. They have harmful health effects that include damage to the liver, kidney and nervous system, and they cause nausea, headaches and eye, nose and throat irritation.) In addition, from 2010 to 2012, about 22% of the freshwater quality monitoring sites in Ontario rivers were rated as marginal or poor quality, which is worse than the national average of 14%.

4.6.1 Ministry Does Not Know the Extent of Harm Resulting from Emitter Violations That It Has Identified

The Ministry's inspection database does not track the extent of damage caused by violations related to risks to the natural environment and human health. While the emitter inspection database includes different risk categories for major and minor risks, it does not quantify local impacts.

For example, Ministry analysis of information regarding emissions in excess of legal limits indicated that 61 industrial emitters exceeded their sewage emission limits a combined 791 times in 2014. One-third of these emitters accounted for 571 of the violations, and some emitters exceeded the limit for two or more types of contaminants. E.coli (an indicator of the presence of disease-causing organisms) was one of the contaminants identified as having the highest number of emission violations. The Ministry did not assess the impact of such violations on the communities surrounding the emitters.

4.6.2 Self-Registered Emitters Not Required to Report Level of Pollutants

There are currently over 4,600 known self-registered emitters, none of which are required to report the amount of their emissions to the Ministry. Consequently, the Ministry does not know to what extent these emitters are complying with the allowable emission limits, or how these emitters are impacting the environment and human health.

The Ministry could not estimate the amount of various pollutants that have been emitted by self-registered emitters. For example, automotive refinish coatings release hexavalent chromium, cadmium and lead, which are toxic air contaminants that can seriously damage the liver and kidneys, and can cause birth defects. The Ministry does not know how much of these contaminants is being emitted by automotive refinishing facilities.

4.6.3 Ministry Does Not Fully Assess the Impact of Emissions under the Environmental Approvals Program

Although many emitters with Environmental Compliance Approvals are required to submit

information about their levels of emissions to the Ministry (such as the amount of pollutants that have been emitted over a given period), the Ministry only checks that emitters are complying with the limits and conditions of their approvals. It does not assess the cumulative environmental and health impacts of emissions in various regions throughout the province.

Also, if data from the Ministry's other monitoring programs indicate that air or water quality has worsened, the Ministry does not assess to what extent the approvals program is responsible for this and what corrective action needs to be taken. An August 2016 report by CancerCare Ontario and Public Health Ontario stated that exposure to fine particulate matter is a significant public health concern in Ontario. They calculated an estimated 560 additional lung cancer cases per year that they have attributed to exposure to fine particulate matter levels consistent with those in 2010. Fine particulate matter is a mixture of solid and liquid particles—such as sulphate, nitrates, ammonia, sodium chloride, black carbon and mineral dust—that can penetrate and settle deep in the lungs. Studies indicate that chronic exposure to particles contributes to the risk of developing cardiovascular and respiratory diseases, as well as lung cancer. The Ministry has not identified a threshold to define safe levels of exposure to these particles because small particulate pollution has health impacts even at very low concentrations. The Ministry's *Air Quality in Ontario 2014* report stated that major sources of fine particulate matter include smelters, power plants and industrial facilities, accounting for 21% of emissions in the province. All of these activities require environmental approvals.

Appendix 4 lists the 10 emitters in Ontario with environmental approvals that had the highest emissions of contaminants causing air-quality-related issues in 2014.

In comparison, in 2008, Public Health Toronto established a data collection system called ChemTRAC to better understand where 25 priority chemicals come from. ChemTRAC is an inventory of the amount and sources of air pollution within the Toronto region that collects information from businesses and institutions. Data collected can be used to better understand contaminant trends over time and highlight key sources. The Ministry does not have a similar means in its environmental approvals program of determining contaminant trends in Ontario.

RECOMMENDATION 12

To effectively regulate polluters and address potential public health concerns, the Ministry of the Environment and Climate Change (Ministry) should implement processes to:

- require self-registered emitters to routinely report emissions data;
- analyze data from self-registered emitters and emitters with Environmental Compliance Approvals to determine the cumulative pollutant levels of current activities in regional areas;
- assess the environmental emissions impact of approving new emitting activities in regional areas prior to issuing approvals; and
- ensure that when data from other ministries' environmental monitoring programs indicate that air or water quality has worsened in particular regions across the province or in the province as a whole, the Ministry should assess to what extent the approvals program is responsible and take necessary corrective actions.

MINISTRY RESPONSE

The Ministry concurs with the Auditor General's recommendation relating to assessing and analyzing emissions data. Assessing cumulative effects is important for Ontarians' health and the province's environmental quality.

The Ministry is implementing the Air Quality Management System as part of a federal initiative in Ontario that identifies air zones to consider when making environmental approval

decisions and developing technical and site-specific standards. The Ministry will continue to take steps to improve air quality by reducing smog-causing pollutants in Ontario.

With the implementation of the proposed Air and Noise Emissions Environmental Activity and Sector Registry, the Ministry will have additional emissions data and will have better tools for public reporting and to analyze data.

The Ministry is also developing a process for assessing cumulative effects that will allow Ministry reviewers to account for multiple sources of pollutants when making their decisions. Information from existing air monitoring networks, emissions inventory data and multi-source modelling will be part of the decision-making process. When implemented, this process will enable the Ministry to make decisions on Environmental Compliance Approval applications for new or expanded facilities with a more comprehensive understanding of the current air quality in different parts of the province.

Appendix 1: Application Fee[1] Schedule for Select Systems, Sites and Facilities

Prepared by the Office of the Auditor General of Ontario

Administrative Processing Fees	Fee Amount
Hauled sewage or bio-solids waste management system—no technical review required	$50
All other systems and sites not requiring technical review	$100
All other systems and sites requiring technical review	$200
Technical Review Fees[2]	
Hazardous waste or liquid industrial waste processing site	$1,500 if capacity is 100 tonnes or less per day $6,000 if capacity is more than 100 tonnes per day
Hazardous waste or liquid industrial waste incineration site	$42,000
Non-hazardous waste processing site	$1,200 if capacity is 100 tonnes or less per day $4,800 if capacity is more than 100 tonnes per day
Non-hazardous waste transfer site	$900 if capacity is 100 tonnes or less per day $3,600 if capacity is more than 100 tonnes per day
Non-hazardous waste incineration site	$18,000 if capacity is 100 tonnes or less per day $42,000 if capacity is more than 100 tonnes per day
Mobile PCB destruction facility that uses thermal treatment	$12,000
Mobile PCB destruction facility that uses chemicals	$200
Municipal or private sewage system	$5,000 if maximum capacity is not more than 4,550 cubic metres per day $10,000 if maximum capacity is more than 4,550 cubic metres per day
Industrial sewage system	$6,000
Storm and sanitary sewer	$900
Storm and sanitary pump station	$1,800

1. The application fee is the sum of the administrative processing fee and applicable technical review fees.
2. Technical review fees are for reviews of reports, such as those related to emissions, noise assessments and hydrogeological assessments.

Appendix 2: The 10 Largest Fines for Violations of Environmental Laws, January 2004–June 2016

Prepared by the Office of the Auditor General of Ontario

Emitter(s)	Location	Type of Operation	Year of Conviction	Amount of Fine (Including Any Victim Surcharge)	Description of Violation
Sunrise Propane Energy Group Inc	Toronto	Propane filling plant	2016	$6,625,000	In August 2008, several explosions occurred at the plant, killing one worker. The explosions discharged contaminants from fuel tanks and resulted in an evacuation of approximately 12,000 residents and businesses within 1.6 km. Area residents suffered injuries and burns from the explosions, and local shops were forced to close. Following the explosion, the Ministry ordered Sunrise to clean up the affected area, but Sunrise did not fully comply. Instead, the City of Toronto oversaw the clean-up. The company and two of its directors were fined a total of $6.625 million for discharging a contaminant that caused adverse effects (as defined in the *Environmental Protection Act*) and failing to comply with a Ministry order.
310 Waste Limited; Rail Cycle Incorporated; 2020780 Ontario Inc; 20207000 Ontario Inc.	Vaughan	Waste disposal site for solid non-hazardous industrial and commercial waste	2011, 2008 (appealed)	$1,433,750	On October 12, 2004, a fire began at a waste disposal facility operated by the four companies and continued to burn for several days, affecting neighbouring residences and schools. Charges were laid against the four companies and three of their directors after an investigation by the Ministry. The companies and the individuals were fined a total of $1.147 million plus a victim surcharge of $287,750 for causing the emission of a contaminant into the natural environment that caused an adverse effect. All three individuals were also each sentenced to 11 days in jail.
BP Canada Energy Company	Sarnia	Natural gas refinery	2009	$1,000,000	In March 2009, during functionality testing of the refinery's valves, a vapour plume travelled offsite in a northerly direction. The plume lasted approximately 10 minutes. Some Sarnia residents reported experiencing temporary physical symptoms as a result of the odour. These included headaches, sore throats and nausea. The discharge also caused disruptions to schools and businesses. Following an investigation by the Ministry, BP pleaded guilty to discharging, causing or permitting the discharge of a contaminant. It was fined $800,000 plus a victim surcharge of $200,000.

Emitter(s)	Location	Type of Operation	Year of Conviction	Amount of Fine (including Any Victim Surcharge)	Description of Violation
Chinook Global Limited	Sarnia	Chemical manufacturing facility	2007	$950,000	In July 2005, following unusually heavy rainfall, Chinook discharged treated sewage directly into the St. Clair River for eight days, which violated its approval terms. On the eighth day, Chinook's laboratory found indications of a high concentration of ammonia in the sewage that exceeded allowable limits. Following an investigation by the Ministry, Chinook was charged for permitting a discharge of ammonia into the river that impaired water quality, and for failing to report the exceedances to the Ministry as soon as reasonably possible. Chinook pleaded guilty and was fined $760,000 plus a victim surcharge of $190,000.
310 Waste Limited; 2020700 Ontario Inc.	Vaughan	Waste transfer and processing facility	2006	$887,500	In June 2003, a Ministry inspection revealed that the facility was exceeding its waste storage limit by several thousand tonnes. The Ministry ordered the companies to remove all excess waste from the site, but a later inspection revealed that the companies had not complied with the order. Following a Ministry investigation, the companies were charged with violating the *Environmental Protection Act*. The companies pleaded guilty and were fined a total of $710,000 plus a victim surcharge of $177,500.
Maple Leaf Foods Inc. (operating as Rothsay)	Hamilton	Food processing plant	2005	$853,125	On numerous dates in 2001, 2003 and 2004, odours emanating from the plant led to complaints of nausea and outdoor social events having to be cancelled. In addition, on three occasions, Rothsay failed to provide to the Ministry shipping manifests for the transportation of wastes generated at its plant. It also failed to comply with Ministry orders to submit storm water studies, decommission two of its sewage lagoons, take samples of sewage and analyze them, and maintain sewage quality. After Ministry investigations, charges were laid against Rothsay. Rothsay pleaded guilty and was fined a total of $682,500 plus over $170,625 in victim surcharges.
Shell Canada Limited	Sarnia	Oil refinery	2015	$825,000	In January 2013, liquid containing mercaptan (a pungent-smelling gas) leaked into an on-site ditch that emptied into the refinery's storm sewer system. The system brings storm water and surface runoff to the refinery's sewage treatment plant for processing. Following the incident, Shell recommended to the City of Sarnia that a shelter-in-place advisory (advising people to stay inside with doors and windows shut and heating systems shut down) be issued for the refinery area, including the area where the Aamjiwnaang First Nation community lives. Following a Ministry investigation, Shell was charged with permitting the discharge of a contaminant into the natural environment that caused an adverse effect. Shell pleaded guilty and was fined a total of $825,000.

Emitter(s)	Location	Type of Operation	Year of Conviction	Amount of Fine (Including Any Victim Surcharge)	Description of Violation
Thermosets Limited; Demolition and Recycling Inc.	Belleville	Construction waste disposal site	2008	$823,750	Thermosets Limited and Demolition and Recycling Inc. are located in Belleville on the site of a former manufacturing plant that produced resins and formaldehyde. The plant ceased manufacturing in 1992. Following Ministry investigations, the companies were convicted of violations related to excavations and discharges from the site. These included the discharge of PCB-contaminated sediments, and failure to comply with orders to remediate the site and clean up the discharged sediment. Because the site is near marshlands, some of the sediment travelled into Bay of Quinte wetlands. The two companies and their shared president were fined a total of $659,000 plus a victim surcharge of $164,750. The president was also sentenced to four months in jail.
NOVA Chemicals (Canada) Ltd.	Sarnia	Chemical manufacturing facility	2007	$687,500	In September 2005, a hydrocarbon leak occurred at the NOVA facility, and elevated benzene levels were recorded in the surrounding air. NOVA attempted to stop the leak but was not able to repair the equipment until the next morning. The leak had an adverse effect on neighbouring industries, and the Aamjiwnaang First Nation evacuated its homes and other buildings when benzene was detected in them. NOVA was charged with discharging a contaminant into the environment contrary to the *Environmental Protection Act*. NOVA pleaded guilty and was fined a total of $550,000 plus a victim surcharge of $137,500.
Suncor Energy Products Inc.	Sarnia	Oil refinery	2009	$625,000	Between June 2007 and August 2008, Suncor reported a number of sulphur dioxide exceedances into the outside air. Suncor also informed the Ministry that its equipment that discharges gases into the air had not been constructed to the approved height. It further reported that it failed to comply with its Certificate of Approval by not having an emergency contingency plan in place. Following a Ministry investigation, Suncor was charged with discharging a contaminant into the air that exceeded the regulated limit and failing to comply with its Certificate of Approval. Suncor was found guilty and fined a total of $500,000 plus victim surcharges of $125,000.

Appendix 3: The Top Five Changes Needed in the Environmental Approvals Program*

Prepared by the Office of the Auditor General of Ontario

Rank	Change
1	**Training:** The Ministry should provide inspectors with regular training (for example, on new environmental standards, requirements and emerging issues).
2	**Tools:** The Ministry should provide inspectors with better tools (for example, modern equipment for data entry and taking samples) to make the inspection process more efficient.
3	**Information systems:** The Ministry's information systems should be improved to enable inspectors to easily access all relevant data about a particular facility prior to conducting an inspection.
4	**Outreach activities:** The Ministry should strengthen its outreach activities to ensure that operators who require an environmental approval are aware of their responsibility to obtain one.
5	**Timely review of applications:** The Ministry should conduct more timely reviews of applications for Environmental Compliance Approvals.

* Based on the results of our survey of Ministry inspectors.

Appendix 4: The 10 Largest Emitters in Ontario

Source of data: Environment and Climate Change Canada

Emitter	City	Type of Operations	Total Emissions in 2014 (Tonnes)*
Vale Canada Limited	Copper Cliff (near Sudbury)	Metal production and processing	143,598
Glencore Canada Corporation	Falconbridge (near Sudbury)	Metal production and processing	36,707
ArcelorMittal Dofasco Inc.	Hamilton	Iron and steel manufacturing	20,261
Imperial Oil	Nanticoke (near Brantford)	Petroleum manufacturing	14,537
Imperial Oil	Sarnia	Petroleum manufacturing	13,615
Essar Steel Algoma Inc.	Sault Ste. Marie	Iron and steel manufacturing	9,000
U.S. Steel Canada Inc.	Haldimand County (near Hamilton)	Iron and steel manufacturing	8,928
Cabot Canada Limited	Sarnia	Chemical manufacturing	7,789
Columbian Chemicals Canada Ltd.	Hamilton	Chemical manufacturing	7,496
St. Mary's Cement Inc.	Bowmanville	Cement and concrete product manufacturing	7,135

* Represents the combined emissions for a group of contaminants (known as "criteria air contaminants") that cause air-quality-related issues such as smog and acid rain. These contaminants include sulphur oxides, nitrogen oxides, particulate matter, volatile organic compounds, carbon monoxide and ammonia. 2014 is the most recent year for which emissions data is available.

Ministry of the Environment and Climate Change

Environmental Assessments

1.0 Summary

An environmental assessment is a planning and decision-making process that evaluates the potential "environmental impacts" of a proposed project or plan. This process is required under the *Environmental Assessment Act* (Act), primarily for public-sector projects and plans. The intent of the Act is to establish a process that identifies and resolves potential environmental problems before actual environmental damage occurs, for the betterment of Ontarians. Environmental assessments are intended to identify ways to prevent or mitigate negative effects of projects and plans, and find alternatives and consider public concerns prior to going ahead with the project or plan.

The Ministry of the Environment and Climate Change (Ministry) is responsible for administering the Act. The scope of "environmental impacts" under the Act is broad: in addition to the impact on the natural environment, it includes human life, social, economic and cultural factors that influence a community. The Act also allows for most environmental assessments to be "streamlined"—that is, subject to pre-set and less rigorous processes for projects considered to be routine and to have predictable and manageable environmental impacts.

Overall, our audit found that Ontario's environmental assessment process needs to be modernized and aligned with best practices in Canada and internationally. Because the Act is 40 years old—and is, in fact, the oldest environmental assessment legislation in Canada—it falls short of achieving its intended purpose. For example:

- **Ontario is the only Canadian jurisdiction in which environmental assessments are generally not required for private-sector projects.** These projects—such as mining operations or chemical manufacturing facilities—proceed without an up-front evaluation of the environmental impacts of the project. Such impacts can be extensive and can affect Ontarians for many years. For example, as of March 31, 2015, the government identified that it had a liability of $1.2 billion to clean up 47 contaminated sites that were caused by mining in Ontario over the years. (See **Section 3.10** Management of Contaminated Sites in our *2015 Annual Report*.) With over 4,400 active and abandoned mine sites and 15,000 recorded mine hazards, MiningWatch Canada reports that Ontario ranks first in Canada as having the biggest environmental liability in the mining sector.
- **Environmental assessments are not completed for many significant government plans and programs.** The impact of

government plans and programs can have a broader and longer-term impact compared to individual projects, and therefore warrant a thorough assessment beyond that which is possible for individual projects. Although the Act applies to government proposals, plans and programs, only streamlined assessments have been conducted, and only for forest-management plans. No other environmental assessments have been completed for any government plan or program in the last two decades. This is because:

- **The Act is not specific about the types of plans and programs that must be assessed.** This means that determining whether a government plan—for example, the province's Long-Term Energy Plan and the Ministry's cap-and-trade program—requires an environmental assessment is open to interpretation by the provincial ministries and agencies that propose the plan.
- **Other legislation undermines the role of environmental assessments by exempting certain plans and programs from requiring them.** For example, the Climate Change Action Plan, transportation plans, and the government's renewable energy program are exempt from requiring an environmental assessment. In reaction to this, 92 municipalities have passed resolutions as "unwilling hosts" to wind farm developments. These resolutions do not have the authority to stop any wind farm development projects.

Public consultation is one of the cornerstones of the environmental assessment process. Prior to passing the Act in 1976, the government emphasized the important role the public can play in identifying potential impacts, assessing their significance, and evaluating the advantages and disadvantages of a project or plan. However, the benefits of public input have not been realized because:

- **Decisions regarding whether to grant public requests for more extensive consultation are at the Minister's discretion, with no clear criteria or an independent body to ensure objectivity.** In the last five-and-a-half years, the Minister has denied all but one of the public requests to have 177 streamlined assessments "bumped up" to comprehensive assessments. Also, the Minister has denied all 190 public hearing requests related to four projects (Durham and York Energy Centre, Hanover/Walkerton Landfill Expansion, West Carleton Environmental Centre, and Highway 407 East Extension). Clear communication about why requests were rejected would instill more public confidence in the environmental assessment process.
- **The public is not informed about most projects.** The majority of projects undergo the less rigorous streamlined environmental assessment process that includes about 30 days of public consultation. The Ministry's website only has information about projects undergoing comprehensive environmental assessments. Neither the project owners nor the Ministry provide the public with information about streamlined assessments beyond this brief consultation period.

Neither the comprehensive nor the streamlined process is effectively or efficiently overseen by the Ministry. As a result, the public obtains minimal assurance that these processes are effective in preventing and/or mitigating the negative environmental impacts of projects.

Other significant observations include the following:

- **The type of assessment required for a particular project is often not based on the project's potential environmental impact.** For example, the basis for determining whether a comprehensive or a streamlined assessment is required for a particular project often depends on its size, scale and cost rather than its potential impact.

- **The Ministry has no assurance that streamlined assessments are conducted properly because of its limited involvement.** Many streamlined assessments are completed without the Ministry's knowledge—including, for example, 80% of those conducted by the Ministry of Transportation in the last five years. Without knowledge of these assessments, Ministry staff cannot provide input into these assessments. In cases where the Ministry was aware of the projects and had reviewed the assessments, deficiencies were identified in more than half the assessments, indicating that project owners were not always conducting them properly.
- **Lengthy Ministry reviews of public requests to bump up streamlined assessments to comprehensive assessments cause unnecessary project delays.** Multiple layers of reviews—including four levels of sign-off by the Director, Assistant Deputy Minister, Deputy Minister and the Minister— resulted in an average of seven months of delays, but did not substantively change the outcome of the review. The additional reviews generally only resulted in grammatical wording changes or merely restated existing commitments in the environmental assessments. Projects were delayed until all reviews were completed, which often resulted in financial and non-financial costs to project owners.
- **The cumulative effects of multiple projects are usually not assessed.** Despite international best practices, project owners are not required to consider the cumulative effects of other relevant activities such as known future projects and those that are already occurring in the project area; this can result in projects going ahead in areas that are already subject to significant environmental stresses.
- **The Ministry does not have effective processes to ensure that projects are implemented as planned.** Such processes could include field inspections during project implementation or requesting data, after projects are implemented, that shows their environmental impact.

This report contains 12 recommendations, consisting of 20 actions, to address our audit findings.

OVERALL MINISTRY RESPONSE

The Ministry appreciates the Auditor General's observations and recommendations. We will implement many of the recommendations in the short term and continue to review further improvements in the longer term.

The protection, conservation and wise management of the environment for the betterment of Ontarians are the guiding principles for Ontario's environmental assessment program. The Ministry recognizes the importance of environmental assessments being an effective tool to evaluate impacts of proposed projects and to identify ways to mitigate any environmental damage.

The Ministry is continuously working to improve Ontario's environmental assessment program, which was the first of its kind in Canada. We are proud of the work that has been done, such as strengthening consultation opportunities for the public and Indigenous communities.

We recognize that more needs to be done to ensure environmental assessments are timely, effective and properly based on environmental risk. That is why the Ministry will improve its guidance to project owners, members of the public and Ministry staff.

We will further integrate the assessment of climate change and cumulative effects into the Ministry's decision-making process. The Ministry has prepared a draft guide to consider climate change in environmental assessment and has made it available for public review. In 2017, we will finalize a draft guideline for public review for assessing cumulative effects for comprehensive environmental assessments.

We are committed to public transparency and meaningful consultation. The Ministry is undertaking a scoped review of the *Environmental Bill of Rights* that will include reviewing consultation requirements related to environmental assessments.

The Ministry will also work with project owners on options to strengthen access to and transparency of environmental assessment information. It is critical that the Ministry, government agencies, Indigenous communities and the public are properly informed of projects being planned in communities so that they can participate in the process.

2.0 Background

2.1 Overview of Environmental Assessment in Ontario

The *Environmental Assessment Act* (Act), which came into force in 1976, governs the environmental assessment process in Ontario. The Act was designed to establish the planning and decision-making process that would evaluate the potential positive and negative environmental effects of a proposed project and alternatives to it, before the project was begun.

The Ministry of the Environment and Climate Change (Ministry) is responsible for administering the Act. The Act requires anyone who wishes to proceed with an "undertaking" to apply to the Minister of the Environment and Climate Change for approval. It defines "undertaking" broadly, as "an enterprise or activity or proposal, plan or program" by a public body or by a municipality. The Act also extends to government plans and programs.

The Act, therefore, applies mainly to public-sector projects, such as those of provincial ministries, agencies and municipalities. The only exceptions to this are large municipal infrastructure projects undertaken by the private sector, electricity-generation and transmission, and waste-management projects, and rare cases where the Ministry explicitly requires an environmental assessment. Occasionally, private-sector project owners will voluntarily conduct an environmental assessment.

Under the Act, the project owner must first conduct an environmental assessment before proceeding with a project. (In this report, anyone who is required to conduct an environmental assessment—referred in the Act as the proponent—is referred to as the project owner.) This is required for a wide range of projects such as highways, landfills, electricity-generating stations, municipal roads and sewage treatment plants, as well as forestry and provincial park management activities.

There are two broad types of environmental assessments in Ontario—comprehensive and streamlined. These differ in the extent of both the planning and public consultation activities that the project owner must undertake and the Ministry's involvement during the assessment. The two types and their differences are described in **Section 2.3**.

2.1.1 Why Environmental Assessments Are Important

Potential Project Risks

Certain types of projects undertaken by both the private and the public sector have the potential to harm the environment, wildlife, and human populations if carried out without regard to their impact. They can result, for example, in contamination of the soil, pollution of the air and water, destruction of habitats and damage to places of economic and cultural significance. The effects can be extensive, and may last for many years.

Human populations can be affected by significant projects or plans in nearly every aspect of their lives, notably in their health but also socially, economically and culturally. When the government proposed the Act over 40 years ago, it stated that without a strong provincial involvement in the early stages of the project, "society could often be in a situation of reacting to environmental problems that could have been avoided."

Benefits of an Environmental Assessment

Environmental assessments are intended to identify stakeholder concerns as well as alternative solutions and/or measures to prevent or mitigate negative environmental impact, before irreversible decisions and commitments are made regarding a project.

"Environment" is defined broadly in the *Environmental Assessment Act* to include the natural environment, as well as human life, social, economic and cultural conditions that influence the community.

To achieve the benefits intended by the Act, Ministry policy states that project owners should abide by the following key principles when conducting an environmental assessment for their proposed project:

- Consideration of a reasonable range of alternatives (including not doing the project or finding alternative methods of implementing the project).
- Consideration of all aspects of the environment as broadly defined in the legislation.
- Systematic evaluation of the environmental effects of the proposed project and its alternatives.
- Consultation with potentially affected and other interested persons throughout the assessment.

At the end of the environmental assessment process, project owners must prepare an environmental assessment report that documents the planning process that was followed for the proposed project.

All environmental assessments—whether comprehensive or streamlined—follow these key principles.

2.1.2 Ministry Staff Responsible for Environmental Assessment Process

Approximately 30 staff at the Ministry's head office in Toronto and its five regional offices across the province—the Central, West Central, Southwest, Eastern and Northern regions—are involved in managing the environmental assessment process. They receive support from 120 staff with technical expertise in areas such as air and water quality assessment, engineering and environmental planning. Many of these staff members, however, also have responsibilities in other programs administered by the Ministry.

2.2 History of the Environmental Assessment Process in Ontario

The *Environmental Assessment Act* came into force in 1976, at a time when no such legislation existed in Canada. Since then, Ontario has made various changes to its environmental assessment process. **Appendix 1** provides a detailed chronology of significant developments since the Act was passed.

2.2.1 Legislative Developments

Although in 1976, the Act applied only to public-sector projects, the government's intent at the time was for the environmental assessment process to apply to activities within both the public and private sectors. In the late 1980s, it became Ministry policy to make certain large private-sector waste-management projects such as landfills and energy-from-waste facilities subject to the Act.

In the late 1990s, the government made significant amendments to the Act aimed at making environmental assessments "less costly, more timely and more effective." Such amendments imposed time frames for the Ministry's review of environmental assessment documentation and made public consultation a legal requirement, while also giving the Minister the power to determine which part of the environmental assessment would be referred for a public hearing.

The Ministry also passed regulations under the Act in 2001, 2007 and 2008 in response to government commitments and initiatives. Specifically:

- The 2001 regulation expanded the scope of the Act to include private-sector electricity

generation and transmission projects, in response to the government's 1997 commitment to make all electricity generators and transmitters subject to the same rules. By expanding the scope of the Act, the government made all electricity projects subject to the same regulatory approvals. The regulation also introduced a streamlined assessment process for certain electricity projects that met the threshold for this process.

- The 2007 regulation expanded the scope of the Act to private-sector waste-management projects, and introduced a streamlined assessment process for certain waste-management projects that met certain thresholds. This was in response to recommendations made by the Environmental Assessment Advisory Panel in 2005 (described in **Section 2.2.2**).
- The 2008 regulation introduced a streamlined environmental assessment process for all public transit projects in response to the government's MoveOntario 2020 initiative. The initiative would fund 52 rapid-transit projects throughout the Greater Toronto and Hamilton area by 2020.

2.2.2 Environmental Assessment Program Reviews

The Ministry has reviewed the environmental assessment process twice— from 1988 to 1992 and again from 2004 to 2005—in an effort to identify ways to improve the program.

From 1988 to 1992, the Environmental Assessment Program Improvement Project consulted with the public and representatives from non-governmental organizations. Then, in 2004 the government established the Environmental Assessment Advisory Panel to provide recommendations on improving the program, particularly as it relates to waste, energy and transit projects. Both program reviews resulted in recommendations to change the legislation as well as certain processes.

Appendix 2 lists the key recommendations from the 1992 and 2005 program reviews, including their current status. The Ministry has taken some action on many recommendations, for example, by developing guidance on how to apply the requirements of the Act, revising its guidelines on public consultation, and creating a website to provide information about environmental assessments.

In March 2015, the Minister announced that another review of the environmental assessment program would start in the fall of 2015, stating that the process "is very time consuming." The review had not begun at the time of the completion of our audit.

2.3 Types of Environmental Assessments

In Ontario, environmental assessments can be comprehensive or streamlined, with the streamlined assessments generally requiring less rigorous review and public consultation. **Figure 1** illustrates the main differences between the two types of assessments.

2.3.1 Comprehensive Environmental Assessments

Comprehensive environmental assessments are the most rigorous type of assessment in terms of planning and public consultation requirements; they are intended to be prepared for large-scale, complex projects where environmental impacts cannot be easily anticipated or mitigated. As shown in **Figure 2**, the 20 comprehensive environmental assessments approved by the Ministry from 2010/11 to 2014/15 have been primarily waste-management and transportation projects. See **Appendix 3** for a listing of these environmental assessments.

Submission and Approval Process

Comprehensive assessments are completed in two stages: the terms of reference stage and then

Figure 1: Comparison of Types of Environmental Assessments

Prepared by the Office of the Auditor General of Ontario

	Comprehensive environmental assessments	Streamlined environmental assessments	
Nature of projects	Intended for large-scale, complex projects	Intended for routine projects that have predictable and manageable environmental effects	
Documents outlining required environmental assessment steps[1]	Terms of Reference	Class Environmental Assessment Policy Documents	Regulations under the *Environmental Assessment Act*
Examples of projects	Large landfills, provincial (e.g., 400 series) highways, waterfront development	Municipal infrastructure, sewage treatment facilities, highway maintenance	Electricity generation and transmission, waste management, public transit
Volume of projects (last five years)	20	At least 1,870	At least 48
Extent of Ministry[2] review and involvement during the environmental assessment	Ministry **must** review all documents[3]	Ministry **may** review documents[3]	
Required approval for environmental assessment	Environmental assessment **requires** approval by Minister and Cabinet to proceed	Environmental assessment **does not require** approval by Minister or Cabinet to proceed	
Public requests for more extensive review or public consultation	Public may request a hearing with the Environmental Review Tribunal	Public may request project be bumped-up to undergo a comprehensive environmental assessment[4]	
Post-environmental assessment monitoring	Project owner is required to submit monitoring reports[5]	Project owner is **not required** to submit monitoring reports **unless** project owner commits to it or is required by the Ministry	

1. These documents outline the process that project owners must follow, including public consultation requirements, when conducting the environmental assessment. See **Appendix 4** for a description of the Terms of Reference, and **Appendix 5** for a description of the Class Environmental Assessment Policy Document. These documents must be approved by the Ministry.
2. All references to Ministry in this figure refer to the Ministry of the Environment and Climate Change. References to the Minister refer to the Minister of the Environment and Climate Change.
3. Documents reviewed by the Ministry include the Terms of References, Environmental Assessment report, and the studies that support the environmental assessment.
4. In the small portion of cases when the Ministry receives a request to bump up a streamlined project to undergo a comprehensive environmental assessment, the project cannot proceed until the Minister has made a decision. This does not apply to public transit projects.
5. The monitoring reports describe the status of actions taken by the project owner to comply with the commitments made in the environmental assessment report, as well as the conditions imposed by the Minister.

the environmental assessment stage. **Appendix 4** illustrates the submission and approval process for comprehensive environmental assessments.

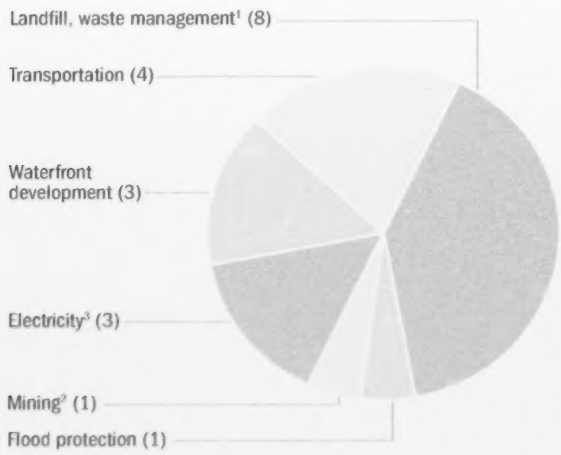
The Ministry attaches legally binding conditions to the approved environmental assessment report that apply to the entire project from design through implementation and operation, and up to the future closure of the project. Such conditions may include, for example, conducting ongoing public consultation during construction or monitoring the quality of groundwater.

Opportunities for Public Input in Comprehensive Environmental Assessments

During the environmental assessment, project owners must notify the public (for example, through newspapers, direct mail or a website) of opportunities to review any of the key documents related to the environmental assessment, including the terms of reference, the environmental assessment report and the related studies. The public can provide feedback at consultation events, submit written comments on these documents, or contact

Figure 2: Comprehensive Assessments by Project Type, 2010/11–2014/15

Source of data: Ministry of the Environment and Climate Change



1. These waste management projects include facilities that convert waste to energy.
2. The mining company voluntarily conducted an environmental assessment. Mining companies are usually not required to conduct a provincial comprehensive environmental assessment, and usually do not voluntarily do so.
3. The projects are related to the construction of infrastructure that would supply electricity to mining operations.

the project owner or the Ministry directly about their concerns about the project.

In addition, once the Ministry has reviewed the environmental assessment report, it is required to publish the results of its review and to solicit public comment on the Ministry's review. Any member of the public can request that the Minister refer the project to the Environmental Review Tribunal (Tribunal) for a public hearing or to a third-party mediator.

2.3.2 Streamlined Environmental Assessments

Streamlined environmental assessments are to be conducted for projects that are considered to be routine, and have predictable environmental effects that can be readily managed. There are two types of streamlined assessments: class environmental assessments (Class EAs) and regulated environmental assessments (regulated EAs). The main differences between Class EAs and regulated EAs are summarized as follows:

- **Types of projects:** While Class EAs are conducted for 11 groups (or "classes") of projects ranging from municipal infrastructure and transportation through forest management, regulated EAs are conducted for three specific types of projects—electricity generation, waste management and public transit. **Appendix 5** lists the types of projects covered in each of the 11 Class EAs and the three types of regulated EAs.
- **EA project rules:** For Class EAs, the rules on how to conduct the environmental assessment are set out in standardized environmental assessment documents, one for each of the 11 project groups. For regulated EAs, project owners must follow the standardized process outlined in the specific regulation (described in **Section 2.2.1**).

Planning and consultation activities for streamlined assessments are managed by the project owner, with little Ministry oversight—in contrast to the Ministry's active oversight with a comprehensive assessment. Also, in contrast to comprehensive assessments, project owners do not need Ministry approval to proceed with the project once it completes the environmental assessment.

Appendix 6 provides an illustration of the streamlined environmental assessment process. In the last five years, at least 1,900 streamlined assessments have been completed for a range of projects.

Ministry Involvement in Streamlined Environmental Assessments

During a typical streamlined environmental assessment process, project owners must notify the Ministry at the start and completion of the environmental assessment. The Ministry is not required to review the environmental assessment report or provide feedback for each project. However, in

some cases, the Ministry reviews the environmental assessment report for a particular project to determine whether the project owner has considered all environmental impacts, and comments on any concerns.

Public Requests for Comprehensive Assessment

While project owners are conducting streamlined assessments, they must consult with the public through public meetings that are announced in local newspapers. Ministry policies state that the public should additionally have an opportunity to review the environmental assessment report once the project owner has completed the assessment. Members of the public and other provincial agencies, such as Conservation Authorities, can then request that the Minister "bump up" a streamlined project to require the project owner to conduct a comprehensive assessment.

Once a bump-up request is made, the project owner cannot proceed with the project until the Minister makes a decision. Even if the request is denied, the Minister may still impose conditions on the project owner to address public concerns raised in the request or other environmental concerns, if warranted.

2.4 Co-ordination with Federal Environmental Assessment

Some projects, such as certain electricity generation and transportation projects, require both provincial and federal environmental assessments. Federal environmental assessments are governed by the *Canadian Environmental Assessment Act, 2012*.

Both provincial and federal environmental assessment processes are based on the same key principles discussed in **Section 2.1.1**. However, as shown in **Appendix 7**, the types of projects covered and the impacts that are evaluated differ under each process. Specifically:

- A federal environmental assessment is required for projects that are specifically listed in a regulation under the *Canadian Environmental Assessment Act, 2012*, including pipelines, large mines that meet certain production capacity thresholds, nuclear waste disposal facilities, airports, and offshore oil and gas facilities. The federal Act makes no distinction between public- and private-sector projects, unlike Ontario's *Environmental Assessment Act*, which requires a provincial environmental assessment for public-sector projects and two kinds of private-sector projects: electricity generation and waste management.
- Under the federal environmental assessment, project owners evaluate environmental effects based on the components of the environment that are within the federal legislative authority, such as fish and fish habitat, migratory birds and federal lands, as well as effects on Indigenous peoples. Under the provincial environmental assessment, project owners are required to evaluate economic, social and cultural factors that affect the community in addition to impact on the natural environment.

2.5 Chronology of Regulatory Approvals and Permits

Often, obtaining an approval for an environmental assessment is the first of many regulatory permits required by a project owner before its project can be implemented. Many projects require further permits, such as an environmental approval to emit contaminants into the land, air or water; work permits for any work on Crown land; as well as municipal and federal permits. **Section 3.05** of our Annual Report addresses environmental approvals. **Appendix 8** illustrates the chronology of obtaining the required regulatory approvals and permits, beginning with obtaining approval for an environmental assessment.

3.0 Audit Objective and Scope

The objective of our audit was to assess whether the Ministry of the Environment and Climate Change (Ministry) has effective systems and processes in place to:

- ensure that projects that can have a negative impact on the environment and human health are appropriately planned, approved and carried out in compliance with relevant legislation, regulations and Ministry policies, and that such negative impacts are actually prevented or minimized through the law and its application; and
- assess and report on the effectiveness of its environmental assessment process in identifying and mitigating negative environmental effects of projects.

Senior management at the Ministry reviewed and agreed with our audit objective and related criteria.

Our audit work was conducted primarily at the Ministry's head office in Toronto between November 2015 and May 2016. We also visited three of the Ministry's five regional offices (Central, Northern and Southwest). In conducting our audit work, we reviewed applicable legislation, regulations, Ministry policies and relevant environmental assessment files, and other information. We also interviewed staff at the Ministry's head, regional and district offices.

We met with representatives from the Office of the Environmental Commissioner of Ontario and the Environmental Review Tribunal to obtain their perspectives on the environmental assessment process in Ontario. In addition, we interviewed staff from Hydro One, the Ministry of Transportation, and the Ministry of Natural Resources and Forestry to understand how they conduct class environmental assessments and to obtain their perspectives as initiators of class environmental assessment projects. We interviewed representatives from the Municipal Engineers Association and surveyed and received responses from about 100 municipalities regarding their views on the environmental assessment process. We also met with representatives of private-sector groups such as the Residential and Civil Construction Alliance of Ontario and professional environmental assessment consultants who are involved in conducting environmental assessments.

As well, we interviewed non-governmental environmental groups such as the Wildlife Conservation Society of Canada, Nature Canada and the Canadian Environmental Law Association, to obtain their views on the environmental assessment process in Ontario. We met with representatives of the Canadian Environmental Assessment Agency to understand the federal environmental assessment process, and spoke with representatives from environmental assessment offices in British Columbia, Alberta, Saskatchewan, Manitoba, and Quebec.

In addition, we engaged an independent consultant with expertise in the field of environmental assessments to assist us on this audit.

4.0 Detailed Audit Observations

4.1 Environmental Assessment Not Conducted for Many Private-Sector Projects in Ontario

Ontario is the only Canadian jurisdiction in which environmental assessments are generally not required for private-sector projects. The only private-sector projects that must be assessed are electricity, waste management, and large municipal infrastructure projects by private developers.

4.1.1 *Environmental Assessment Act* Has Not Been Revised to Reflect Changes in Project Ownership

The *Environmental Assessment Act* applies to all public-sector but only a small portion of private-sector projects. The Ministry informed us that when the Act was passed 40 years ago, it was intended to focus on large-scale infrastructure projects undertaken by the public sector. Since then, the private sector has taken on more projects that have significant impact on the environment.

Despite these changes, the Ministry has only expanded the scope of the Act to private-sector electricity, waste-management, and large municipal infrastructure projects. As a result, many private-sector projects with the potential to harm the environment go ahead without adequate consideration of their impacts, or even without determining whether the project should proceed in the first place. Such environmental harm may not be identified until many years or decades later after damage has occurred, and the effects may be long-lasting and irreversible.

Since the Act came into force, the Ministry has received public requests to require an environmental assessment for 42 private-sector projects that are not currently captured under the electricity or waste-management regulations (see **Figure 3**). The Ministry granted the requests for only seven of those projects.

The lack of environmental assessment requirements for private-sector projects was noted in the 2005 program review by the Environmental Assessment Advisory Panel. The panel recommended that the comprehensiveness and extent of an environmental assessment should depend on the environmental benefits and risks of a project rather than merely whether the project is undertaken by the public or private sector.

The Ministry indicated to us that in response to this recommendation it created streamlined processes for waste-management projects that extended to the private sector. Even though the Act gives the Ministry authority to require other private-sector project owners to conduct environmental assessments, the Ministry has still not reviewed whether projects such as mining and chemical manufacturing should be required to do so. **Figure 4** shows examples of private-sector projects and their negative environmental impact. Even though some of these projects were initiated prior to the passing of the *Environmental Assessment Act*, they provide insight into the impact private-sector projects can have on the environment.

Figure 3: Public Requests for Environmental Assessment for Private-Sector Projects,[1] 1976–2016
Prepared by the Office of the Auditor General of Ontario

Type of Project	Number of Projects the Public Requested to Undergo Environmental Assessments	Number of Projects Where Request was Denied	Number of Projects Where Request was Approved
Quarries	13	12	1
Industrial facilities[2]	8	6	2
Mining operations	5	4	1
Residential development	5	5	0
Private infrastructure[3]	3	3	0
Other[4]	8	5	3
Total	**42**	**35**	**7**

1. Figure includes requests related to private-sector projects that are not currently captured under the electricity or waste-management regulations.
2. Industrial facilities include 3 manufacturing plants, a refinery, a mineral processing plant, and 2 cement plants and kiln, and a pulp mill.
3. Private infrastructure projects include a marina expansion, a snowmobile trail, and a septic disposal system.
4. Other projects include an ecological restoration, a harbour remediation, an access road to an island, a grain storage facility, a municipal airport, an energy-from-petroleum-coke generation station, a storage facility for dangerous goods, and a crematorium.

Figure 4: Examples of Private-Sector Projects and Their Environmental Impacts

Prepared by the Office of the Auditor General of Ontario

Project Name	Year	Project Description	Description of Environmental Impact
Steep Rock Mine (north of Rainy River, Northern Ontario)	1943-1979	The iron mine included three large open pit excavation sites. When the mine closed in 1979, the open pits were left to fill with water and eventually become lakes.	The abandoned mine has left acid rock drainage in surface waters, hydrocarbon and metal contamination in the soils and groundwater, and flooding of contaminated water in the open pits. As of February 2016, the Ministry of Natural Resources and Forestry (MNRF) had spent over $12 million on site clean-up, site monitoring and studies, and securing hazards for public safety. Despite the MNRF's remediation efforts, the site remains contaminated. The lakes formed in the open pits are expected to overflow by 2070. The MNRF is currently seeking public input on a long-term remediation plan.
Chemtura Chemical Manufacturing (Elmira, north of Waterloo)	1941-present	In 1941, a chemical company in Elmira, Ontario began manufacturing a wide range of chemicals for the agricultural, rubber, and plastics industries. Throughout the 1940s and 1960s, the company buried its waste as was the accepted practice at the time.	In 1989, the Ministry of Environment determined that two municipal wells and six private wells in Elmira were contaminated with chemicals discharged by the buried waste. To this day, the over 9,000 residents of Elmira are unable to drink local groundwater.
Dryden pulp and paper mill (Dryden, Northern Ontario)	1963-1970	A paper mill complex discharged organic waste into the English-Wabigoon river system since the mill's construction in 1913. From 1963-1970, it operated as a chloralkali plant, which manufactures materials to bleach paper.	Between 1963 and 1970, the mill discharged approximately nine to 11 metric tonnes of mercury into the river system, contaminating the fish with levels above those acceptable for human consumption, with this still being the case to this day. The local people of Grassy Narrows First Nation have suffered from mercury poisoning since then.
Smithville PCB storage site (Niagara region)	1978-1985	In 1978, a private waste management company located in an industrial park began transferring and storing PCB (polychlorinated biphenyl) in Smithville, Ontario.	Poor waste management led to PCB contamination of the fractured bedrock beneath the site. In 1985, the Ministry assumed control of the site to begin remediation. In 1988, the contamination was found to have migrated to the town's drinking water, and a pipeline had to be built to bring drinking water to the residents of Smithville from neighbouring Grimsby. The remediation is ongoing and the pipeline is still in use today.
"Chemical Valley" (Sarnia)	2007-present	Currently, Sarnia is home to approximately 40% of all of Canada's chemical industry. In 2007, Shell Canada announced interest in building a new oil refinery in the region. As a private-sector undertaking, the proposed project was not subject to the requirements of the *Environmental Assessment Act*. However, on March 7, 2007, Shell entered into a voluntary agreement with the Minister of the Environment to make the proposed project subject to an environmental assessment. Shell Canada withdrew its proposal and cancelled the project in 2008.	The combined level of heavy industry in Sarnia has led to the region having high levels of pollution. Sarnia also has significantly higher hospital admissions rates than nearby London. Air pollutants in Sarnia have been linked to asthma, smog, cancer, and developmental issues. Refineries also release mercury, sulphur dioxide, and volatile organic compounds.

Environmental Assessment Conducted for Both Public- and Private-Sector Projects in Other Jurisdictions

The environmental assessment laws in all other jurisdictions in Canada require environmental assessments for certain types of projects, regardless of whether the project owner is in the public or private sector (see **Appendix 9** for a summary of the larger provinces). For example:

- Laws in some jurisdictions—such as the federal government, British Columbia, Alberta, southern Quebec, New Brunswick and Nova Scotia—list those projects that require an assessment. These include mines, quarries, large tourist resorts, manufacturing and oil drilling.
- In other jurisdictions—such as Saskatchewan, Manitoba, northern Quebec and New Brunswick—the legislation uses broad criteria based on the characteristics of a proposed project (for example, location, impact on rare or endangered species, likely release of pollutants) to determine whether an assessment is required.

With the exception of electricity and waste-management projects, the *Environmental Assessment Act* in Ontario does not prescribe specific types of projects that require an assessment, nor does it use project-specific criteria to determine whether an assessment is required. Instead, the determination of whether to conduct an environmental assessment is based on who the project owner is.

4.1.2 Potentially Significant and Long-Term Impacts of Mining Projects Not Assessed

Ontario is the largest mineral producer in Canada—accounting for one-quarter of the total Canadian mineral production—but is the only jurisdiction in the country that does not require mining projects to be subject to a comprehensive environmental assessment before proceeding. While an environmental assessment may be required for certain components of a mine, such as the construction of a road leading to the mine or the mine's electricity generation facility, each component is evaluated in isolation.

Although mining companies in Ontario require certain approvals and permits—such as approvals to conduct their activities on Crown land from the Ministry of Natural Resources and Forestry and the Ministry of Northern Development and Mines—a comprehensive evaluation of the impact of a mining operation is not required to determine whether the project should proceed in the first place. This is in contrast to all other jurisdictions in Canada. For example:

- In 2014, the Canadian Environmental Assessment Agency rejected a proposed open-pit copper/gold mine for the second time after the environmental assessment determined that the mine would cause significant adverse effects on water quality, fish and fish habitat, on the current use of lands and resources by certain Aboriginal groups, and would cause significant adverse cumulative effects on the South Chilcotin grizzly bear population.
- In 2012, the British Columbia Environmental Assessment Office rejected a proposed copper/gold mine project in British Columbia because the environmental assessment concluded that its potential long-term risks outweighed the potential benefits to the province. Risks included potential impact on a genetically unique sockeye salmon population and the potential for long-term provincial liability for future clean-up costs.

Of the 32 mining operations and related projects that were initiated after the enactment of the Act and are currently being planned or in production, only eight have undergone a provincial environmental assessment. For these eight, the mining companies voluntarily conducted the assessments because the project was already subject to a federal environmental assessment.

The environmental and financial costs of mining projects are well known, and continue long after the mine is closed. In particular:

- Mining permanently changes the natural landscape, for example, by stripping and flooding productive lands. In addition, toxic waste from mining activities can result in water and soil contamination that can affect ground and surface water, aquatic life, vegetation and wildlife.
- The Province is currently responsible for significant costs to clean up contamination caused by mining activities because mining companies have failed to do so. Our 2015 report on the management of contaminated sites noted that, of the 10 contaminated sites with the largest provincial rehabilitation cost, four are former mineral extraction sites facing a total estimated rehabilitation cost of $968 million.

For the remaining 24 mining projects, the Ministry has not assessed their environmental impact as defined in the Act.

4.1.3 Other Regulatory Processes No Substitute for Environmental Assessment

Private-sector projects may require other types of municipal, provincial or federal approvals and permits to begin operations. However, even though many of these are also meant to protect the environment, we noted that, even collectively, they do not result in the same level of comprehensive evaluation as an environmental assessment. **Figure 5** compares factors considered in an environmental assessment against those considered in other approvals.

While many other regulatory approvals for private-sector projects—such as mines, quarries, manufacturing plants and refineries—consider the natural environment, they do not include all key elements of an environmental assessment. For example, while operators of chemical manufacturing plants must obtain an environmental approval from the Ministry to emit contaminants into the land, air and water, the approvals do not consider the social, cultural and economic impacts of the emissions.

Figure 5: Comparison of Ontario's Environmental Assessment Process and Other Regulatory Processes
Prepared by the Office of the Auditor General of Ontario

	Environmental Assessments	Other Regulatory Processes/Approvals*
When is approval required?	During project planning	Prior to project construction or operation, but after project planning
What is the overall purpose of the process?	To ensure that potential environmental effects are considered before a project begins.	To establish rules for specific activities in a way that helps protect the natural environment and human health.
Does the assessment consider: • alternatives to the project – i.e., different ways of addressing the need being addressed by the project; and • alternative methods of carrying out the project – i.e., different ways of doing the same project?	Yes	No
Does the assessment consider potential environmental effects on the natural, social, economic, cultural and built environments and how they interrelate for every alternative being considered?	Yes	No (only the natural environment)

* Other approvals could include, but are not limited to, Environmental Compliance Approvals, permits to take water, work permits to conduct work on Crown lands, or endangered species overall benefit permits.

RECOMMENDATION 1

The Ministry of the Environment and Climate Change should review and update the requirements in the *Environmental Assessment Act* to ensure that projects with the potential for significant negative impact are assessed, regardless of whether the project is initiated by the public or private sector.

MINISTRY RESPONSE

The Ministry acknowledges that projects that can have a significant impact on the environment should be properly assessed.

The Ministry will make improvements in the short term to the environmental assessment program within the existing legislative framework, and will be incorporating the Auditor General's recommendations in this work. Substantial reforms, such as designating the private sector in the legislation, would require amendments to the Act and are being considered for long-term improvements.

The environmental assessment process is complex, and any changes involve a broad range of ministries and external stakeholders. That is why the Ministry is taking a phased approach to reform, looking to ways it can further improve the existing program now.

4.2 Environmental Assessment Not Completed for Many Government Plans and Programs with Long-Term and Wide-Ranging Impacts

The Act requires an environmental assessment for proposals, plans and programs related to public-sector activities. Only streamlined assessments have been conducted, and only for forest-management plans; no environmental assessments have been completed for any other government plan or program since the early 1990s, when Ontario Hydro conducted, and later withdrew, an environmental assessment of its Demand Supply Plan. The environmental assessment process highlighted deficiencies in the plan, which was also withdrawn.

Environmental assessments have not been conducted on any recent government proposals, plans or programs because:

- the Act is not clear regarding which types of public-sector proposals, plans and programs require an environmental assessment; and
- legislation related to many government initiatives specifically exempts the initiative and related activities from environmental assessment, thereby undermining the requirements of the Act.

Although the individual projects that are implemented through government plans and programs may require an environmental assessment, the impact of government plans and programs can be broader and longer-term compared to individual projects. Therefore, government plans and programs warrant a thorough assessment beyond that which is possible for individual projects.

Best practices highlight the need to carry out environmental assessments of government plans and programs. The International Association for Impact Assessment—a leading organization in best practices related to environmental assessments—calls for strategic assessments of energy plans, transportation plans, urban expansion plans, climate change strategies, and "actions that will affect large numbers of people."

4.2.1 *Environmental Assessment Act* Not Clear on Which Plans and Programs Require Environmental Assessments

The Act is not specific on the types of public-sector proposals, plans and programs that must be assessed. This lack of clarity means that determining whether a government plan or program requires an assessment is open to interpretation by the provincial ministries and agencies that propose the plan or program. Consequently, the government has not conducted environmental assessments when it has

wanted to implement certain plans more quickly. For instance:

- The Ministry of Energy did not conduct an environmental assessment of its 2013 Long-Term Energy Plan (Energy Plan). Our 2015 audit of the Electricity Power System Planning found deficiencies in the Energy Plan, including the lack of analysis of alternatives and insufficient stakeholder consultation—both of which are key components of an environmental assessment. A previous energy plan, the 2007 Integrated Power System Plan, was specifically exempted from environmental assessment through a regulation under the *Environmental Assessment Act* because it was the government's position that policy planning is not subject to an environmental assessment.
- The Ministry did not conduct an environmental assessment of its cap-and-trade program that will be launched in 2017 to help reduce greenhouse gas emissions. Our 2016 audit of the Ministry's climate change initiatives (see **Section 3.02** of this Annual Report) noted that the Ministry did not consider alternatives, or assess the impact on key stakeholders, before it decided to adopt the cap-and-trade model. It also did not assess the potential economic impact of cap-and-trade on key stakeholders such as northern and rural communities and First Nations communities, despite initially noting the need for such an assessment.
- The *Climate Change Mitigation and Low-carbon Economy Act, 2016* exempted the Ministry's Climate Change Action Plan (Action Plan) from having to undergo an assessment. The Action Plan outlines the Ministry's plans for at least the next five years to reduce greenhouse gas emissions using revenues raised from the cap-and-trade program that will be implemented in 2017.
- The *Green Energy Act, 2009* expedited the development of renewable energy by overriding many of the government's usual planning and regulatory oversight processes. One of these regulatory requirements was the environmental assessment process. Since 2009, renewable energy projects have been exempt from environmental assessment requirements.

One result of this is the lack of opportunity for the public to evaluate options and provide feedback, which has contributed to public concerns about wind farm developments. Currently, 92 municipalities have passed resolutions as "unwilling hosts" to wind farm developments. These resolutions do not have the authority to stop any wind farm development project but highlight the Ministry's lack of public consultation in this regard. Public concerns regarding wind farms include possible health concerns from the noise, property devaluation and risks to wildlife. For example, a July 2016 report by Bird Studies Canada—using information from a database it developed with the Canadian Wind Energy Association, Canadian Wildlife Service, and the Ontario Ministry of Natural Resources and Forestry—estimated that over 42,000 bats and over 14,000 birds were killed by wind turbines in Ontario in a six-month period from May 1 to October 31, 2015.

4.2.2 Other Legislation Undermines the Role of Environmental Assessments

As shown in **Figure 6**, various laws related to many government initiatives specifically exempt certain plans and any related activities from having to undergo an environmental assessment. Although these laws still require public consultation, the processes do not require the evaluation of all environmental impacts and of alternatives. For example:

RECOMMENDATION 2

The Ministry of the Environment and Climate Change should review and clarify the intent of the *Environmental Assessment Act* regarding the

Figure 6: Legislation That Exempts Government Plans from Environmental Assessment

Prepared by the Office of the Auditor General of Ontario

Note: The *Environmental Assessment Act* requires an environmental assessment for undertakings, which is defined as "an enterprise or activity or a proposal, plan or program in respect of an enterprise or activity by public bodies or municipalities".

Year	Legislation	Plans not subject to an Environmental Assessment referred to in the Legislation
2001	*Oak Ridges Moraine Conservation Act*	The Act states: The Oak Ridges Moraine Conservation Plan is not an undertaking as defined in the *Environmental Assessment Act.* The Oak Ridges Moraine Conservation Plan provides direction regarding land use to ensure that only those uses that maintain the ecological functions of the area are permitted.
2005	*Places to Grow Act*	The Act states: A growth plan is not an undertaking as defined in the *Environmental Assessment Act.* Growth plans are long-term plans that identify where and how growth should occur within a region, and help guide government investments.
	The Greenbelt Act	The Act states: The Greenbelt Plan is not an undertaking as defined in the *Environmental Assessment Act.* The Greenbelt Plan identifies where urbanization should not occur in order to permanently protect about 1.8 million acres of environmentally-sensitive and agricultural land in the Golden Horseshoe.
2006	*Clean Water Act*	The Act states: A source protection plan is not an undertaking as defined in the *Environmental Assessment Act.* Source protection plans contain policies to reduce, eliminate or manage identified risks to drinking water sources.
2008	*Lake Simcoe Protection Act*	The Lake Simcoe Protection Plan to protect and restore the ecological health of Lake Simcoe and its watershed is not an undertaking as defined in the *Environmental Assessment Act.*
2009	*Metrolinx Act*	Transportation planning policy statements issued by the Minister of Transportation and municipalities' transportation master plans are not undertakings as defined in the *Environmental Assessment Act.*
2010	*Far North Act*	The Act states: The Far North policy statements and the Far North land-use strategy and plan are not undertakings as defined in the *Environmental Assessment Act.* The Far North policy statements and land-use strategy identify where development can occur, and where land is dedicated to protection in the Far North of Ontario.
2015	*Great Lakes Protection Act*	An initiative to protect and restore the health of the Great Lakes–St. Lawrence River Basin that is approved under the *Great Lakes Protection Act* is not an undertaking as defined in the *Environmental Assessment Act.*
2016	*Climate Change Mitigation and Low-carbon Economy Act*	The government's action plan to reduce greenhouse gas emissions and any revisions to it are not undertakings as defined in the *Environmental Assessment Act.*
	Energy Statute Law Amendment Act, 2016	To the extent that any plan, directive, direction or other document issued or otherwise provided in relation to long-term energy planning is an undertaking as defined in the *Environmental Assessment Act*, that undertaking is exempt from that Act.
	Resource Recovery and Circular Economy Act (Waste-Free Ontario Act)	The Act states: The Strategy [for a Waste-Free Ontario: Building the Circular Economy] is not an undertaking for the purposes of the *Environmental Assessment Act.* The Waste-Free Ontario Strategy aims to reduce waste and increase the reuse and recycling of waste across all sectors of the economy, etc.

types of government plans and programs that must undergo an environmental assessment.

MINISTRY RESPONSE

The Ministry agrees with the Auditor General's recommendation.

As noted in our response to Recommendation 1, more substantial reforms, such as clarifying the types of government plans and programs that must undergo an environmental assessment, would require amendments to the Act. These reforms are being considered for long-term improvements. However, the Ministry does not have the final decision when other legislation exempts certain plans and programs from the *Environmental Assessment Act*.

4.3 Thoroughness of Environmental Assessment Not Based on Project's Environmental Risk

It is reasonable that the public would expect those projects that present greater risks to the environment to receive a more comprehensive environmental assessment. However, we noted this was often not the case, since the basis for deciding between a comprehensive or a streamlined assessment often depends on a project's size, scale and cost, rather than its potential environmental impact.

4.3.1 Projects with Greater Risk Are Not Always Thoroughly Assessed

The criteria for determining whether a comprehensive or streamlined assessment is required for a particular project are primarily based on its size, scale and cost. A 2014 report by the Residential and Civil Construction Alliance of Ontario observed that Ontario is the only jurisdiction in Canada in which the cost of infrastructure projects is one of the primary bases for determining the degree of public consultation and environmental assessment requirements. Using such quantitative criteria to determine the thoroughness of an assessment means that other relevant factors that may be more likely to reflect the project's potential impact—such as the level of public interest or concern, or the potential location—may be disregarded. In contrast, in Saskatchewan, one of the criteria to determine whether an environmental assessment is required is the possibility of causing widespread public concern over "potential environmental changes."

For example, landfills with capacity of less than 100,000 m^3 require only a streamlined assessment. Based on this threshold, a small landfill situated in a heavily populated urban area with the potential for significant impact on the environment and human health would undergo a streamlined assessment, whereas a large landfill situated in a sparsely populated region with little impact on human health would undergo a comprehensive assessment.

We found instances where streamlined assessments were completed for projects that have the potential for significant environmental impact and/or public concern. In the following example, members of the public requested a comprehensive assessment because they believed that the significant risks associated with the project warranted a more in-depth assessment than a streamlined assessment would have entailed.

In 2014, a streamlined assessment was completed for a 230 kilovolt transformer station in the Oak Ridges Moraine—a federally and provincially protected area where thousands of plant and animal species, 88 species at risk, and over 466 rare species found mainly on moraines, have been identified. The Ministry received public requests, including many from environmental groups, for a comprehensive assessment given the project's high-risk location. Concerns about the project included its potential impact on the wildlife in the sensitive areas of the moraine and toxic leaks into the watershed affecting source-water quality. The Ministry denied the requests after reviewing studies presented by the project owner and the requesters.

This, despite Ministry documentation of its review, which acknowledged that members of the public did not have an adequate opportunity to assess potential alternative solutions for the project. The project owner subsequently submitted additional documentation to the Ministry describing the rationale for the chosen option. A comprehensive environmental assessment would have allowed for more extensive public consultation, documentation and Ministry involvement.

RECOMMENDATION 3

The Ministry of the Environment and Climate Change should review and revise its criteria for determining whether a comprehensive or streamlined environmental assessment is required to ensure that the thoroughness of assessment is commensurate with the project's risk and potential impact.

MINISTRY RESPONSE

The Ministry agrees with the Auditor General's recommendation.

The Ministry is committed to working with streamlined assessment project owners to assess risk and review the criteria in their streamlined assessment documents, during the five-year review anniversaries of their documents. This will ensure there is alignment between a project's environmental risk and the thoroughness of the environmental assessment required. The public will be consulted on any changes required.

The Ministry will also review its environmental assessment codes of practice and guides to determine if additional guidance is required for how project owners assess risks from their projects.

As a modern regulator, the Ministry believes that the level of environmental risk and potential impact of a project is a fundamental consideration in determining the level of assessment.

4.4 Ministry Has Little Information on the Volume or Quality of Streamlined Assessments

The majority of projects that are subject to an environmental assessment in Ontario are assessed under a streamlined process. The Ministry has limited involvement in these assessments. While the Ministry is responsible for administering the *Environmental Assessment Act*, it does not know how many streamlined assessments are completed annually, nor does it have assurance that these assessments are being done properly.

4.4.1 Many Streamlined Assessments Completed without Ministry's Knowledge

The Ministry does not have information on how many streamlined assessments are completed by project owners every year, or even estimates of the volume of such projects.

The Ministry becomes aware of streamlined assessment projects—which represent over 95% of all environmental assessments—only if it is notified by project owners. In the last five years, the Ministry's regional offices received information pertaining to approximately 1,200 streamlined assessments.

We analyzed the information provided to us by the Ministry's regional offices regarding these 1,200 streamlined assessments and compared the results to the number of assessments reported by the project owners. We noted instances where the number of streamlined Class EAs conducted by project owners was significantly higher than those known to the Ministry. When the Ministry does not know about assessments, it has no opportunity to ensure they were properly conducted. For example, the Ministry was only aware of:

- about 20% (185) of the 888 class EAs that the Ministry of Transportation has conducted in the last five years; and

- about 6% (17) of the 278 class EAs that Infrastructure Ontario has conducted in the last five years.

Ministry policy regarding streamlined assessments states that project owners are to notify the Ministry at the start of the environmental assessment and when the environmental assessment report is available for review. We found, through our review of a sample of streamlined assessments that were known to the Ministry, that project owners often did not notify the Ministry at key stages of the assessment. For example:

- In over 40% of the assessments we reviewed, the project owner did not inform the Ministry that it was starting an environmental assessment.
- In almost 25% of the assessments we reviewed, the project owner did not inform the Ministry that the environmental assessment report was available for the Ministry's review and comments. In these cases, the project commenced without an opportunity for the Ministry to provide any input.

Ministry staff also informed us that in some instances the Ministry became aware of a Class EA project only through bump-up requests from the public. Staff at the Ministry's regional offices had no previous information on approximately one-quarter of the 177 Class EA projects for which the Ministry had received bump-up requests in the last five-and-a-half years. In these cases, the project owner had already conducted public consultation and prepared the assessment report before the Ministry became aware of the project. As a result, the Ministry missed opportunities to contact project owners in the early stages of the assessment to ensure that all the risks are identified and addressed.

For example, Ministry regional office staff were not made aware at an early stage of a project that involved widening a road next to a provincially designated Area of Natural and Scientific Interest. The Ministry only learned of it after it received a bump-up request. A local Conservation Authority had expressed concerns to the project owner throughout the streamlined assessment process, suggesting that wildlife ecopassages (structures that allow animals to cross human-made barriers safely) be added to the project design. When the project owner disagreed due to the extra costs, the Conservation Authority submitted a bump-up request. Only after reviewing the bump-up request did the Ministry require the project owner to prepare a wildlife road crossing safety plan, monitor for species-at-risk, and minimize impacts to sensitive areas by consulting with the Ministry of Natural Resources and Forestry and the Conservation Authority. Without a bump-up request, the Ministry would not have known about the project and have had an opportunity to provide input.

RECOMMENDATION 4

To ensure that the Ministry of the Environment and Climate Change (Ministry) has an opportunity to provide input on projects undergoing streamlined assessments, it should:

- clearly communicate publicly the requirement to notify the Ministry of the start and completion of environmental assessments; and
- assess the appropriateness of penalties for project owners, particularly for municipalities or private-sector project owners, that do not adequately inform the Ministry at all required stages of an environmental assessment.

MINISTRY RESPONSE

The Ministry agrees with the Auditor General's recommendation to improve notification practices for streamlined environmental assessments.

- It is vitally important that project owners follow the requirements of streamlined assessment processes by providing the proper notifications to the Ministry, the public and other ministries and agencies that may have an interest in their projects, each and every time. The Ministry chairs a committee with

owners of the streamlined environmental assessment documents, called the Class Environmental Assessment Proponents Working Group. This committee meets several times a year to provide an open forum for discussion of any process issues or common questions. In 2017, the Ministry will work through this committee to discuss proper notification in order to improve awareness of project owners' requirements to notify the Ministry about environmental assessment processes. This work will occur in combination with the commitments made in our responses to Recommendations 6 and 10, including improving guidance to proponents and public transparency for notifications.

- The Ministry has existing tools it can apply when project owners do not adequately inform the Ministry about their environmental assessment projects. Typically, the approach would involve education and outreach, but the Ministry can use other compliance tools should they be required.

4.4.2 Oversight of Streamlined Assessments Hampered by Lack of Resources and Direction

Each of the Ministry's five regional offices has between one and three staff members who are responsible for co-ordinating the review of the environmental assessment reports. At the time of our audit, the caseload of active projects ranged from three to 20 projects per person across the five regional offices. These staff also had responsibility for a range of other programs, and the Ministry had not assessed the resources needed at its regional offices to adequately oversee the environmental assessment program.

The 2005 program review by the Environmental Assessment Advisory Panel noted that fees, if collected from project owners, could be used to support key aspects of environmental assessments, which were under-resourced. It noted that "the absence of fees under the Act is highly anomalous, particularly in light of the significant Ministry resources that are required to review highly technical and often complex environmental assessments." It recommended charging application fees to project owners similar to the user fees levied in other programs, such as the environmental approvals issued under the *Environmental Protection Act*. The Ministry has not implemented this recommendation because the project owners are primarily provincial ministries and municipalities.

Overall, we could not conclude on the extent of Ministry oversight of the approximately 1,200 streamlined environmental assessments that the Ministry had received information on over the last five years. This is because the Ministry did not track which of these it had reviewed. Our review of a sample of these streamlined assessments indicated that Ministry staff evaluated only about half of these.

While the Ministry has an information system to track environmental assessments, regional staff do not have access to this system, because it was designed to be used only by head office staff to track comprehensive assessments and those streamlined assessments for which the Ministry received bump-up requests. Without a means of using this information system to monitor Class EAs, each regional office tracks Class EA projects differently: while some have used information systems designed for other programs (specifically, the system used for the environmental approvals program), others have developed their own record-keeping systems.

The Ministry's head office has not provided guidelines to its regional office staff to ensure that streamlined assessments for at least higher-risk projects are consistently reviewed. Staff at the three regions we visited informed us that they use their

own judgment to determine which projects should be reviewed. Accordingly, we noted inconsistencies among the regions in the types of projects that are reviewed. For example, one region stated that its staff seldom review assessments concerning the right to use Crown land. Another region stated that it was given "internal direction" to not review assessments for transportation projects. Other regions did not specifically exclude any types of assessments from being reviewed. The lack of overall guidance from the Ministry's head office was noted in the 2010 survey of staff at the regional offices, which stated that "despite being the face of the Ministry for all streamlined assessment-related work, there is no communication or direction from Toronto [the Ministry's head office]."

RECOMMENDATION 5

To ensure that the Ministry of the Environment and Climate Change provides useful feedback on streamlined environmental assessments for higher-risk projects, it should:

- develop risk-based criteria to be used to determine which streamlined environmental assessments should be reviewed; and
- assess its current staffing levels at all regional offices and determine the amount of resources necessary to conduct required reviews.

MINISTRY RESPONSE

The Ministry agrees with the Auditor General's recommendation to develop risk-based criteria for the review of streamlined assessments.

- The Ministry will be revising guidance material for staff involved in environmental assessment reviews, including regional offices. As part of this work, the Ministry will incorporate guidance regarding the prioritization of the Ministry's reviews of streamlined environmental assessments, taking into account the environmental risk of the project and regional environmental conditions. The updated guidance is expected in 2017.
- The Ministry will continually review its workload to ensure the regional offices have adequate resources to deliver the environmental assessment program. For example, the Ministry has added and reallocated resources to regional offices to help manage short-term workload increases.

4.4.3 Streamlined Assessments Not Always Done Properly

Ministry regional office staff reviews of streamlined assessments often identified deficiencies in the environmental assessment done by project owners. Such deficiencies confirm the need for the Ministry to provide feedback on streamlined assessments.

In our review of a sample of streamlined assessments, we found that the Ministry identified deficiencies in about three-quarters of the assessments it reviewed. Such deficiencies include insufficient public and Indigenous consultation, lack of details to support the project owner's assessment of environmental impact, and additional measures needed to mitigate impact on the environment. Many of these deficiencies would otherwise not have been detected and corrected, since the only other means of identifying these would have been through a public request for a bump-up to a comprehensive assessment—which occurs with less than 10% of projects.

Our survey of municipalities further confirmed the importance of the Ministry's involvement in the streamlined assessment process. For example, over half of the municipalities that responded to our survey stated that they did not have the internal expertise to conduct the assessments for municipal projects, and those that do have the resources stated that the process is "extremely subjective" and that "more direction could be provided to assist the [project owner] with selecting the appropriate project description." A few also mentioned that Ministry staff have "stopped answering questions or giving advice regarding process, procedures and interpretation of the guidelines," and when Ministry staff have been contacted, "they typically

decline to provide guidance, and have advised that they will only review a project if a bump-up request is received from the public."

RECOMMENDATION 6

To ensure that streamlined assessments are conducted properly, the Ministry of the Environment and Climate Change should:

- consult with stakeholders to determine which areas of the streamlined assessment process require further guidance to be provided; and
- provide clear direction to staff at the regional offices regarding their responsibilities to provide advice to stakeholders.

MINISTRY RESPONSE

The Ministry agrees with the Auditor General's recommendation.

- In 2017, the Ministry will work through the Class Environmental Assessment Proponents Working Group to discuss areas where project owners need additional guidance from the Ministry to support them when they carry out their environmental assessment processes. The Ministry will also assess how its existing environmental assessment compliance audit program may provide insights into where additional guidance to project owners is needed.
- The Ministry also has an internal committee for the regional environmental assessment co-ordinators within the five regional offices, called the Regional Environmental Assessment Coordinators Committee. This committee provides an ongoing forum to communicate common challenges and improvements in carrying out the regions' streamlined assessment reviews. In 2017, the Ministry will use this committee to discuss their advisory roles to project owners and where additional guidance may be needed to assist regional staff in filling this role.

4.5 Lengthy Ministry Reviews of Bump-Up Requests Cause Unnecessary Project Delays

The Ministry consistently exceeds the prescribed time frames for reviewing and deciding on public requests to bump up a streamlined to a comprehensive assessment. The lengthy Ministry reviews cause project delays, which result in financial and non-financial costs to project owners.

Class EA policy documents prescribe certain time frames by which the Ministry is to approve or deny a bump-up request (usually within 45–60 days of receiving the request). As shown in **Figure 7**, in the last five and a half years, the Ministry has completed its work within these time frames only a few times—in less than 5% of the 177 requests—often exceeding them significantly.

4.5.1 Multiple Layers of Reviews Add to Delays, But Do Not Add Value to Project

Each bump-up request for class EA projects is reviewed by at least half a dozen Ministry staff. This includes four levels of sign-off—by the Director, Assistant Deputy Minister, Deputy Minister and, finally, the Minister for final approval—after the reviewer makes the initial recommendation to approve or deny the request.

Based on the Ministry's analysis of time taken to review all requests received in the last five-and-a-half years, the median time for Director sign-off was 80 days, and subsequent sign-offs added an additional 110 days. We reviewed a sample of bump-up requests and found that in all but one of the requests we reviewed, the post-Director review did not substantively change the outcome of the review. We found these reviews generally resulted in grammatical wording changes or merely restated existing commitments in the assessments.

The Act allows the Minister to delegate the authority to approve or deny these requests to the Director. However, the Ministry has only delegated this authority for projects related to forest

Figure 7: Ministry Review Time for Bump-Up Requests, April 2010 to January 2016
Prepared by the Office of the Auditor General of Ontario

		All Reviews[2]		
Types of projects[1]	# of projects with bump-up requests	Target[3] (Days)	# of Reviews Completed within target	Average Review Time (Days)
Public Works	3	66	0	149
Forest Management Class EA	14	45	2	94
Minor Transmission Facilities	6	66	0	196
Municipal Infrastructure Projects	116	66	3	240
Provincial Parks & Conservation Reserves	4	66	1	297
Provincial Transportation Facilities	16	45	1	192
Remedial Flood & Erosion Control Projects	1	66	0	67
Resource Stewardship & Facility Development Projects	16	66	1	152
Waterpower Projects	1	45	0	215
Total	**177**	–	**8**	**213**

1. See **Appendix 5** for examples of projects for each type.
2. Includes initial review by Ministry staff up to Branch Director and reviews by the Assistant Deputy Minister, Deputy Minister, and the Minister.
3. Targets are prescribed in relevant Class Environmental Assessment Policy Documents.

management, electricity and waste management. As a result, the average review time for bump-up requests related to forest management projects was about half that of the other types of class EA projects.

The 2005 program review by the Environmental Assessment Advisory Panel recommended that the Ministry create new procedures that would support a more efficient process for reviewing bump-up requests, but the Ministry has not acted on this recommendation.

4.5.2 Delays Result in Financial Costs to Project Owners

Class EA project owners and other stakeholders (such as representatives of the construction industry) informed us that delays from the lengthy Ministry review result in significant financial costs. For example, the Municipal Engineers Association (Association)—who developed the Class EA framework for municipal infrastructure projects—stated in its *2015 Annual Report* that the lengthy Ministry reviews "are unnecessarily holding up key infrastructure projects, increasing costs and slowing growth and economic development. Equally important are the multitude of projects where a delay of a year just cannot be accepted, and the municipalities are forced to make poor and/or expensive decisions to avoid a bump-up request even though the concern really does not have merit."

Our survey of municipalities confirmed the Association's comments. Over half of the respondents indicated that in many cases when projects have been delayed due to bump-up requests, the delay has negatively impacted the municipality. Municipalities indicated that the delay increases costs in the form of consultant fees "to deal with the requester and comments from the Ministry that may be entirely unrelated to the underlying request"; in additional construction costs if a construction season is lost or work needs to be done in off-season conditions; and in the loss to the public of not having the infrastructure in place when it is needed. For example:

- One municipality stated that the ongoing Ministry delay—which has now exceeded

two years—in constructing an arterial road has compromised the city's ability to plan for infrastructure and capital budgeting. The municipality stated it is close to implementing short-term measures (the cost of which are expected to exceed $1 million) that "will ultimately be considered redundant" once the arterial road is built.

- Another municipality stated that "the bump-up request can also result in significant additional capital costs, for example, aesthetic treatments that are important to only a few people."

4.5.3 Delays from Ministry Review Also Result in Non-Financial Costs

Delays in the Ministry's review of bump-up requests also have significant non-financial implications. For example:

- The Ministry took one year to make its decision regarding a bump-up request for a road realignment project that was intended to improve safety, enhance storm-water management and support growth.
- The Ministry took approximately two years to deny a bump-up request regarding measures to reduce the white-tailed deer population in two provincial parks experiencing overpopulation of that species. The requester was opposed to killing deer. However, independent studies show that deer overpopulation has "devastating and long-term effects on forests" (foraging deer affect the growth of vegetation, leading to reduced plant diversity). The reduction measures were on hold for two years, during which deer populations increased at both parks. The Ministry of Natural Resources and Forestry informed us that the delay resulted in "net negative effects to each park's ecosystem," including reduced diversity of plant species such as ginseng and trilliums, and decline in forest cover.

RECOMMENDATION 7

The Ministry of the Environment and Climate Change should improve the timeliness of its process for reviewing bump-up requests to ensure that its review does not cause unnecessary delays to projects.

MINISTRY RESPONSE

The Ministry agrees with the Auditor General's recommendation.

The Ministry will review its bump-up request process to determine where opportunities exist to improve the timeliness of this process.

The timeliness of the Ministry's review can be affected by not having sufficient detail in the bump-up request about the environmental concerns with the project and how a comprehensive environmental assessment might address those concerns. Therefore, as part of improvements to the environmental assessment program in the short term, the Ministry will prepare guidance to the general public that would complement existing guidance on submitting bump-up requests.

This guidance is expected to be made available for public comment in 2017.

4.6 Impacts of Projects Are Assessed in Isolation

4.6.1 No Requirement to Consider Cumulative Effects of Large, Complex Projects Covered by Comprehensive Assessments

Cumulative effects—meaning the combined impact of past, present and planned future activities in an area, including both human-initiated activities and natural processes—do not usually factor into the Ministry's environmental assessment decision-making. The Ministry encourages, but does not require, project owners to assess the cumulative effects of a particular project. Failure to assess cumulative

effects can result in projects being approved without consideration of all the risks involved.

In 14 of the 20 comprehensive assessments approved in the last five years, the project owners did not assess the cumulative effects of the project. As discussed in **Section 2.3**, projects subject to comprehensive assessments are complex projects associated with environmental impacts that are difficult to manage.

Where project owners assessed their project's cumulative effects, the results of the assessment further confirmed the importance of such an assessment. For example, the cumulative effect assessment for a proposed landfill resulted in the project owners identifying a need for additional mitigation measures. These included controlling the timing of construction projects to reduce air quality, noise and groundwater contamination, as well as restoring wetland and forests damaged by the project.

Other jurisdictions in Canada—including Alberta, British Columbia, Saskatchewan, the Northwest and Yukon Territories, and the federal government—require project owners to assess the cumulative effects of projects.

4.6.2 Streamlined Assessments Also Do Not Consider Cumulative Effects

Except for two defined groups of projects—those related to provincial parks and conservation reserves, as well as any development or other activity on Crown lands—the Ministry does not require project owners to assess the cumulative effects of projects that undergo a streamlined assessment.

In reviewing a sample of streamlined Class EA projects, we did not find any evidence that the Ministry assessed cumulative effects in its review of the environmental assessment documents. The 2005 program review by the Environmental Assessment Advisory Panel also questioned whether the cumulative effects of such projects are being properly monitored by the project owners or the Ministry. We noted the following examples where a cumulative effects assessment should have been conducted:

- **Mercury contamination in the Grassy Narrows First Nations community:** In 2014, the Ministry of Natural Resources and Forestry completed a Class EA to renew an ongoing forest management plan involving clear-cut logging in the vicinity of the Grassy Narrows First Nation community. The Ministry received a request for a comprehensive environmental assessment initiated collectively by a non-governmental organization and the Grassy Narrows First Nation. The people of Grassy Narrows were concerned about the cumulative effect of clear-cut logging in light of the current state of mercury contamination in their local environment. Studies indicated that clear-cut logging increases the transfer of mercury into aquatic systems. The Ministry denied the request for a comprehensive assessment, stating that the forest management plan included best practices to minimize activities associated with the spreading of mercury, such as a ban on clear-cutting of trees within 30 metres of a body of water. However, we noted that other than these best practices, the forest management plan did not include any mercury monitoring or mitigation measures.
- **Sensitive wildlife area:** In 2012, the Government announced that a new gas plant would be constructed three kilometres from a small island with many endangered species—Heritage Canada named it as one of the top 10 "endangered places" in Canada in 2013. The island has also been recognized for at least three decades as an Important Bird Area of Global Significance by international wildlife organizations. The Ministry did not measure the impact on this natural area of the cumulative effects of the proposed gas plant in addition to:
  - an existing power generating station (adjacent to the proposed gas plant);
  - a large cement manufacturing facility already located on the small island; and

- a proposal to install up to 27 wind turbines 50 storeys high on the island.

During the environmental screening process for the new gas plant, the Ministry received three public requests to bump up the project to a comprehensive assessment, citing concerns about the cumulative impact of the four projects on the small, environmentally significant area. All bump-up requests were denied. The Ministry responded that "any consideration of cumulative effects would have to be done in future project evaluations." It further stated that "wind projects are not assessed cumulatively with other sources unless they are other wind projects."

Previous program reviews in 1992 and 2005 recommended that the Ministry should require consideration of cumulative effects in environmental assessments. In 2014, the Ministry updated its environmental assessment guidelines to encourage project owners to include cumulative effects in both comprehensive and streamlined assessments but did not provide direction on how to do so. The Ministry informed us that it is currently developing guidelines to help project owners assess the cumulative effects of their projects, and Ministry staff when reviewing the project owner's assessment. At the time of our audit the Ministry did not have a time frame for when the guidance document will be finalized, or when cumulative effects assessment will be a requirement.

RECOMMENDATION 8

To ensure that the cumulative effects of projects are assessed to prevent or minimize environmental damage, the Ministry of the Environment and Climate Change should finalize its guideline for assessing the cumulative effects of projects as soon as possible. The guideline should:

- apply to both comprehensive and streamlined environmental assessments;
- identify specific factors that must be considered when assessing cumulative effects; and
- include direction for Ministry staff to ensure they weigh the cumulative impact of projects in their decision-making process.

MINISTRY RESPONSE

The Ministry agrees with the Auditor General's recommendation.

The Ministry is committed to incorporating cumulative effects in environmental assessment decision-making.

The Ministry is finalizing a guideline for assessing cumulative effects of a project. At this time the guideline is expected to apply specifically to comprehensive environmental assessments, which are the highest-risk projects that have the greatest potential to contribute to cumulative effects. The specific factors recommended for a proponent to consider are currently under development. When the draft guideline is completed in 2017, it will be posted on the Environmental Registry to provide an opportunity for the public to comment on it before it is finalized and published. The Ministry anticipates working with key stakeholders, including industry, environmental and community groups and Indigenous communities, before finalizing the guide.

4.7 Public at a Disadvantage in Assessment Process

The Act requires public consultation throughout the environmental assessment process. However, this requirement is undermined because certain key decisions regarding public requests are at the Minister's discretion without clear criteria or an independent body to ensure the objectivity of such decisions—in particular:

- when to grant public requests to bump up streamlined assessments, which have minimal public consultation, to comprehensive

assessments, which include extensive public consultation; and
- when to grant public requests for hearings for comprehensive assessments (since there is no option for hearings with streamlined assessments).

Also, the public may not be adequately informed about most projects, and therefore cannot fully participate in the environmental assessment process.

4.7.1 No Clear Criteria or Independent Body to Ensure Decisions about Public Requests Are Made Objectively

Legislative changes made in 1996 gave the Minister unilateral discretion over key decisions related to public requests such as whether to require that a streamlined assessment be bumped up to a comprehensive assessment, or which environmental assessments to refer for a public hearing. Consequently, the environmental assessment process lacks two important mechanisms to ensure that decisions on projects are made objectively and for the protection of the environment:

- **No specific criteria to direct decision-making:** Factors the Ministry considers in reviewing public requests for a comprehensive assessment, or for a public hearing by the Environmental Review Tribunal, are largely subjective—for example, whether the request has "merit and substance" or if it is "being pursued to delay the implementation of the project," or whether the hearing "will be a wise use of resources."

  The 2005 program review by the Environmental Assessment Advisory Panel also raised concerns about the lack of clear criteria for deciding on these public requests. The Panel stated that the environmental assessment process had become unpredictable because of uncertainties about whether a project may be bumped up to a comprehensive assessment or referred to the Tribunal. The government acknowledged the importance of public hearings when it originally proposed the Act, noting the benefits of a venue for discussing and reconciling viewpoints. Such a process provides better support for public involvement, since not all project owners have the resources or inclination to engage in a more extensive public consultation process.
- **No independent body to solicit public input and provide impartial advice:** The 2005 program review also raised concerns about the lack of an arm's-length advisory body even though the Act authorizes the Minister to appoint advisory committees. From 1983 to 1995, the Environmental Assessment Advisory Committee (Committee) served as an impartial body that advised the Minister—and frequently solicited public input—on contentious projects and systemic issues such as identifying the need for possible legislative reform. The Committee was disbanded when the government made major legislative and administrative changes to the environmental assessment program in 1996. While the Environmental Review Tribunal could serve in this capacity, the Minister is responsible for deciding when the Tribunal should be involved—and the Minister has referred only two projects to the Tribunal since 1998.

Public Requests Denied in Contentious Projects

The public has raised concerns regarding the apparent trend of the Ministry denying almost all public requests. In the last five-and-a-half years, the Minister has denied all but one of the requests related to bump-ups for 177 streamlined assessments. Also, all 190 hearing requests related to four projects have been denied for reasons that include the Ministry being satisfied with the project owner's compliance with the agreed-upon terms of reference and that the process has adequately addressed any concerns raised. The Ministry's decision to deny some of these requests may be justified given the level of evidence presented. However, we noted the following instances where the decision-making process

could have benefited from either more meaningful criteria to give the public confidence about the Ministry's decision or from having an independent body adjudicate the contentious issues:

- Between 2005 and 2008, the Ministry received 12 requests from the City of Mississauga, Region of Peel Medical Officer of Health, City of Toronto Medical Officer of Health, and various citizens and citizens' groups to carry out a comprehensive assessment of the proposed Mississauga gas plant. The requesters were concerned about the potential impact of emissions on human health and on the surrounding environment. The Ministry denied all these requests, stating that "the health impacts were assessed to an appropriate degree." Continuing public opposition to the project due to perceived unresolved concerns eventually led to the government's decision to cancel the plant at a cost that we estimated to be approximately $275 million (see our 2013 Special Report on the Mississauga Power Plant Cancellation Costs). Literature as far back as the late 1970s has recognized the importance of environmental assessments in resolving disputes and increasing public acceptance of decisions. Experts in the field of environmental assessments even warned that "without a full and frank examination of the political, emotional and technical issues associated with a particular project, public hostility and resentment … may well spell [its] demise."
- The Ministry received 185 public hearing requests regarding an energy-from-waste facility, citing concerns about impacts on air and water quality, lack of transparency in the process, insufficient commitment from the project owner regarding emissions monitoring, and the need for cumulative-effects assessment. The Ministry denied all the requests, stating that it was "satisfied that the concerns have been addressed or will be addressed through proposed conditions of EA approval."

The Ministry approved the environmental assessment in 2010, and the facility started operations in February 2015. In May 2016, the facility reported that emissions were nearly 12 times the Ministry's limits for dioxins and furans—toxic by-products that can result from burning waste. The project owner shut down a portion of the facility, while the Ministry required the owner to submit a plan to investigate the cause of this exceedance. The investigation found that an operational issue affected the facility's pollution control equipment.

In this case, a public hearing would have allowed for a closer examination of the evidence presented by the project owner to determine whether its measures would be sufficient to keep emissions within the established limits.

The benefits to the environment of holding a public hearing were evident in one of the last projects referred for such a hearing. In 1990, citizens raised concerns regarding a proposed hazardous-waste-processing facility. The public hearing determined that the facility would have contaminated 1,200 hectares of groundwater, requiring up to hundreds of thousands of dollars in remediation costs. The project was rejected by the board that conducted the hearing.

Other Jurisdictions Have Independent Advisory Bodies

While ministerial discretion is not unique to Ontario, other jurisdictions—such as Quebec, Manitoba, Alberta, Nova Scotia, and the federal government—have processes and criteria to support a more objective determination of which projects or plans should be referred to an independent panel or committee review. For example:

- In northern Quebec, environmental assessments are reviewed by boards composed of First Nation, provincial and federal representatives. The Minister makes the final decision

on the project based on the recommendations of these boards.

- In Manitoba, the public may request that projects be submitted to the Clean Environment Commission for a public hearing. The Commission, composed of independent members who may not be employed by any level of government, conducts the hearings, reviews evidence, and presents a report to the Minister containing a recommendation on how to proceed. The Minister makes a final decision on the project.
- In the federal environmental assessment process, the Minister may refer the environmental assessment of a project to a review panel made up of independent experts who conduct the environmental assessment and must hold public hearings.

The International Association for Impact Assessment states that, for the environmental assessment process to be credible, it should be subject to independent checks and verification. Also, "facilitation of public participation by a neutral facilitator improves impartiality of the process.... It also increases the confidence of the public to express their opinions and to reduce tensions, the risk of conflicts among participants, and opportunities for corruption."

RECOMMENDATION 9

To ensure that decisions regarding environmental assessments are appropriate and transparent, the Ministry of the Environment and Climate Change should:

- clarify the criteria for ministerial decision-making regarding public requests for a comprehensive assessment or a public hearing; and
- assess whether to appoint an independent body to provide objective advice on project-specific and systemic issues as needed, especially for projects considered to significantly impact the environment.

MINISTRY RESPONSE

The Ministry agrees with the Auditor General's recommendation to clarify the criteria for decision-making on bump-up and hearing requests, as appropriate.

As part of improving the environmental assessment program in the short term, the Ministry is committed to reviewing the codes of practice and consulting with key stakeholders to consider if additional clarity is required in these documents.

For project-specific issues, there are two mechanisms: first the Environmental Review Tribunal (ERT) has the authority to make project specific decisions when referred by the minister. Secondly Section 31 of the *Environmental Assessment Act* allows the minister to appoint an advisory committee on any matter related to the administration of the Act and provides considerable scope for the minister to seek advice, perspectives and views. The Ministry will assess the effectiveness of these mechanisms.

4.7.2 Public Not Fully Informed about Projects

Representatives from environmental groups have informed us that it is often difficult for the public to find out about streamlined Class EA projects given the lack of centralized, online records of such projects. Project owners are required to notify the public about their projects and the related environmental assessments through notices in local newspapers and direct mail. Some of the municipalities that we surveyed also suggested that a more systematic, centralized notification might be more appropriate. For example, one municipality stated that the notification system should be "modernized to … maximize efficiency of outreach and increase response rates. Project owners are still mandated to incur the cost and issue public notices in a newspaper that may result in only a few people becoming aware of a project."

The Act requires the Ministry to make relevant documentation about projects available to the public upon request. However:

- While the Ministry's website has summary information about comprehensive assessments, it did not include detailed project information. Such detailed information is maintained in paper files (at the Ministry's head office in Toronto) and is made available only if the Ministry receives a request, which relies on members of the public being aware of their right to do so. The Ministry's website does not inform the public of this right, nor does it provide any instructions on how to make such a request.
- As discussed in **Section 4.4.1**, the Ministry has incomplete information on streamlined assessments, and so is not in a position to provide the public with project information.

The 2005 program review recommended that the Ministry create a website "to enable proponents [i.e., project owners] and stakeholders to electronically track the status of the matter under consideration (for example, Ministry review or bump-up request) and to access information or supporting documentation about the matter, and other documentation relating to the environmental assessment program." Although the Ministry has created a website for the small number of comprehensive assessments, the website does not include information about any of the streamlined assessments, or even those for which it received bump-up requests.

In comparison, the Canadian Environmental Assessment Agency, British Columbia and Alberta each maintain an online database of projects that have been approved and those that are currently undergoing an environmental assessment. These online databases also include relevant ministry documents and studies. In addition, the Canadian Environmental Assessment Agency, British Columbia and Saskatchewan also have interactive maps of the projects. Members of the public may also opt to automatically receive information about any project that has been proposed.

RECOMMENDATION 10

To enable the public to fully participate in the environmental assessment process, the Ministry of the Environment and Climate Change should update its website so that the public has access to all relevant information, including the status, for all environmental assessments.

MINISTRY RESPONSE

The Ministry agrees with the Auditor General's recommendation. Public participation opportunities are vitally important for the environmental assessment program. The ideas, questions and concerns that the public and Indigenous communities have are valuable inputs into the project owners' environmental planning and into the Ministry's decision-making process.

The Ministry will examine ways to be more transparent in providing environmental assessment information, including through the use of websites. To that end, the Ministry will work with project owners, through the Class Environmental Assessment Proponents Working Group and five-year review anniversaries of their streamlined assessment documents, to discuss ways to improve online access to environmental assessment information. The Ministry is currently undertaking a scoped review of the *Environmental Bill of Rights*, which will include reviewing consultation requirements related to environmental assessments.

4.8 No Way of Knowing if Assessments Were Effective

The Ministry cannot determine if the environmental assessment process is effective in preventing and/or mitigating the negative environmental impact of assessed projects, because the Ministry:

- does not have effective processes to ensure projects are implemented as planned; and

- has not established measures against which to evaluate the results of the environmental assessments.

4.8.1 Post-Assessment Processes Not Enough to Ensure Projects Are Implemented as Planned

No Ministry Field Inspection During Project Development

The Ministry does not conduct field inspections during project construction or development to determine whether the project is being implemented according to commitments made by the project owners or conditions imposed by the Ministry.

Ministry policy states that the Ministry's field inspectors are responsible for enforcing various laws, including the *Environmental Assessment Act*. However, we interviewed inspectors in the three regions we visited, and none of them have ever inspected a project under either a comprehensive or streamlined assessment process, to determine compliance with the commitments and conditions of the environmental assessment. In the last five years, the Ministry inspected only one of the 20 projects that had been subject to a comprehensive assessment and none of the streamlined assessment projects.

The Ministry informed us that inspections were not necessary because environmental assessments are a planning process, and when subsequent environmental approvals are issued—for example, those issued under the *Environmental Protection Act*—they are followed up with inspections to ensure compliance with approval conditions. However, the Ministry does not have an established process to ensure that subsequent environmental approvals include the mitigation measures agreed to in the environmental assessment.

In addition, we noted that:

- Environmental approvals under the *Environmental Protection Act* are required only for projects that emit pollutants. Projects such as highways, even though they require an environmental assessment, do not require subsequent environmental approvals. Half of the comprehensive environmental assessments in the past five years did not require any subsequent environmental approvals. Also, the Ministry does not inspect such projects to determine whether the project owners are complying with its commitments and the conditions of the environmental assessment after the environmental assessment is approved.

  For example, in 2010 the Ministry approved the environmental assessment for a highway extension that would pass through sensitive lands in Ontario's Greenbelt and Oak Ridge's Moraine. Due to the complexity of the project, the Ministry imposed 20 conditions of approval. These conditions included technical monitoring plans and reports ranging from surface water monitoring to vegetation restoration plans. An environmental approval was not required for the project. In 2015, a Conservation Authority informed the Ministry that the project owner had altered the design that had been approved in the environmental assessment. The Conservation Authority was concerned about the impacts that would result from these changes. Subsequent to the Ministry being informed of the issue, the project owner conducted further consultation with the Conservation Authority to determine a more appropriate design. Had the Conservation Authority not identified these issues, they would not have been resolved.
- Inspections under the *Environmental Protection Act* begin only once the facility is operating—and potentially causing environmental harm—not during construction.
- Our 2016 audit of the Ministry's Environmental Approvals program (see **Section 3.05** of this Annual Report) found that the Ministry annually inspects very few Ontario polluters. Specifically, our audit found that the Ministry was not aware of many polluting activities,

and of those it was aware of, it inspected less than 10% annually.

We noted that the Canadian Environmental Assessment Agency, British Columbia, Saskatchewan, Manitoba and Quebec conduct compliance inspections of approved environmental assessments.

Ministry Does Not Monitor Actual Impact of Approved Projects

All comprehensive assessments require project owners to provide data to the Ministry on the project's impact on the environment. However, for four of the 20 projects that had undergone a comprehensive assessment in the last five years, the Ministry has not been ensuring that project owners are providing this data as required. In August 2015, the Ministry found that over the previous four years, reports had not been submitted for these projects. One of these projects was a landfill expansion that was approved in 2010. The municipality was required to submit annual reports to the Ministry regarding results of its water sampling, but had not done so for four years. When the municipality finally submitted all outstanding reports upon the Ministry's request, the reports showed that the municipality had only taken one-third of the required water samples.

In addition, there is no requirement for project owners that undertake streamlined assessments to provide data to the Ministry on the project's impact on the environment unless the project owner commits to providing the information. These commitments would be included in the final environmental assessment report. However, we found that in over one-third of the streamlined assessments we reviewed, the Ministry had not received the final assessment report.

The International Association for Impact Assessment states that the environmental assessment has little value without post-approval monitoring of a project's environmental impact because the outcomes and consequences of the decision to approve the project will be unknown. Canada and Quebec also require project owners to submit follow-up reports that show how the environmental assessment process helped reduce impacts on the environment.

RECOMMENDATION 11

To assess the effectiveness of environmental assessments, the Ministry of the Environment and Climate Change should ensure that it:

- receives and analyzes information about the actual impact of all assessed projects in the project stages that follow the environmental assessment; and
- compares project impact information with the impacts described in the environmental assessment and follows up on any significant discrepancies.

MINISTRY RESPONSE

The Ministry agrees with the Auditor General's recommendation.

The Ministry acknowledges it can do more to ensure that environmental assessments are effective at assessing and planning for potential impacts of a project.

- The Ministry will examine further measures to improve practices for post-environmental assessment effects monitoring. These measures may include using existing tools such as conditions of environmental assessment approval and strengthening our internal business processes to link the environmental assessment and environmental approvals programs.
- The Ministry will review its internal practices and procedures for review and follow-up of project owners' compliance reports for ways to improve the Ministry's analysis of actual impacts compared to predicted impacts.

4.8.2 Assessments Are Costly and Time-Consuming but Ministry Lacks Performance Measures against Which to Evaluate Their Results

Given that environmental assessments involve significant time and money, for both the Ministry and project owners it is particularly important to ensure these resources are achieving improved environmental outcomes. These are some examples of the cost and time required:

- The 20 comprehensive assessments that were approved in the last five years took an average of almost five years from the submission of the terms of reference to the approval of the environmental assessment. A 2014 report by the Residential and Civil Construction Alliance of Ontario stated that streamlined assessments for municipal infrastructure projects took an average of 26 months to complete.
- Environmental consultants—who conduct environmental assessments on behalf of project owners—informed us that the costs range from $100,000 to $200,000 for streamlined assessments, and from $1 million to $6 million for comprehensive assessments.

Despite such significant time and money invested in environmental assessments, the Ministry has not assessed whether such investment has resulted in the best solutions—or even good solutions—for the environment and the community. We noted that other jurisdictions have measures to help assess how effective their strategies are in achieving their goals. For example:

- British Columbia's Environmental Assessment Office (Office) tracks and reports on the percentage of reviews that are completed within legislative timelines. In addition, to assess how well it is monitoring the projects once they are approved, the Office tracks the number of compliance inspections completed on approved projects, and the percentage of compliance reports from project owners that are reviewed by Office staff and posted online within six weeks of receipt.
- Similarly to British Columbia, the Canadian Environmental Assessment Agency (Agency), a department of the federal government, tracks and reports on the percentage of assessments that are completed within legislative timelines. In addition, the Agency gauges the effectiveness of the assessment process by tracking the percentage of projects where mitigation measures were effective in limiting environmental impact. The Agency also assesses whether the assessment process included meaningful participation of Indigenous groups by measuring how many groups with potential for being impacted provided comments on the assessment documents.

RECOMMENDATION 12

To assess the effectiveness of environmental assessments, the Ministry of the Environment and Climate Change should develop measurable performance indicators against which it can evaluate its delivery of the environmental assessment program.

MINISTRY RESPONSE

The Ministry agrees with the Auditor General's recommendation. We acknowledge the importance of having a system in place to assess the effectiveness of our environmental assessment program.

The Ministry will develop internal performance measures for the environmental assessment program. The Ministry is targeting fall 2017 to build a performance measurement framework.

Appendix 1: Chronology of Significant Developments in Environmental Assessment in Ontario

Prepared by the Office of the Auditor General of Ontario

Legislative Developments		Non-Legislative Developments
Ontario's *Environmental Assessment Act* (Act) came into force	**1976**	
	1983	Government appointed the Environmental Assessment Advisory Committee to advise the Minister on environmental assessment issues
Scope of the Act was extended to private-sector waste management projects such as landfills and energy-from-waste projects	**1987**	
Government passed the *Intervenor Funding Project Act* to provide funding to ordinary people to assist in participating in environmental assessments	**1988**	**1988** First major review of the environmental assessment program (ended in 1992). See **Appendix 3** for status of recommendations
	1995	Government dissolved the Environmental Assessment Advisory Committee
Government repealed the *Intervenor Funding Project Act*	**1996**	
Government passed significant amendments to the *Environmental Assessment Act* (see **Section 2.2.1**)	**1997**	
Government passed a Deadlines Regulation to impose time frames for the Ministry's review of environmental assessment documents	**1998**	
	2000	Environmental Assessment Board was renamed the Environmental Review Tribunal, and independent Board chair was replaced with a provincial civil servant
Government passed the Electricity Projects Regulation to establish a streamlined process for public- and private-sector electricity projects	**2001**	
	2004	Second major review of the environmental assessment program (ended in 2005). See **Appendix 3** for status of recommendations
Government passed the Waste Management Projects Regulation to establish a streamlined process for public- and private-sector waste management projects	**2007**	**2007** Government announced MoveOntario 2020 to fund 52 rapid-transit projects throughout the Greater Toronto and Hamilton area
Government passed the Transit Projects Regulation to establish a streamlined process for transit projects in response to MoveOntario 2020 announcement	**2008**	
	2015	Minister announced third major review of environmental assessment program to begin in fall 2015

Appendix 2: Status of Key Recommendations from 1992 and 2005 Program Reviews

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IMPLEMENTED

- Develop policies and procedures to provide guidance on how to apply the Act (1992, 2005).

SOME ACTION TAKEN

- Develop a framework such that the nature and extent of documentation, notification and planning depend on the environmental risks of the project (2005)

  Ministry action: *Streamlined processes for waste management and transit projects, but criteria are not based on risk of projects.*

- Revise public consultation guidelines to ensure that the public, First Nation and Aboriginal communities receive timely and effective notification about projects, and have adequate comment opportunities (2005)

  Ministry action: *Developed public consultation guidelines, but notification methods do not support timely and effective notification about projects.*

- Establish a website to enable stakeholders to electronically track the status of environmental assessments, and to access supporting documentation about projects and other documentation related to the environmental assessment program (2005)

  Ministry action: *Developed a website, but does not allow for electronic tracking of status of environmental assessments, nor access to supporting documentation about projects.*

- Develop a compliance strategy to improve the monitoring and reporting, including third-party audits, inspection protocols, and training for staff (1992 and 2005)

  Ministry action: *Developed a compliance strategy, but strategy is limited in scope. For example, the requirement to report on actual environmental impact of projects is limited to those approved through comprehensive assessments. The strategy also does not include field inspections of approved projects.*

NO ACTION TAKEN

- Establish an independent advisory body to provide advice to the Ministry and solicit public input (2005)
- Refer projects for public hearings, alternative dispute resolution or mediation in circumstances where, for example, there is significant unresolved public controversy about the proposed project (2005)
- Review and/or upgrade the environmental assessment information system to ensure that it is accessible by all ministry regional offices (2005)
- Create a formal adjudicative process (administered by an independent body) to expeditiously review and decide bump-up requests (2005)
- Amend the *Environmental Assessment Act* to authorize the Ministry to prescribe fees for certain matters under the Act (2005)
- Review the adequacy of time frames and deadlines for the Ministry's review of environmental assessment documents (2005)

Appendix 3: Comprehensive Environmental Assessments Completed from 2010/11 to 2014/15

Prepared by the Office of the Auditor General of Ontario

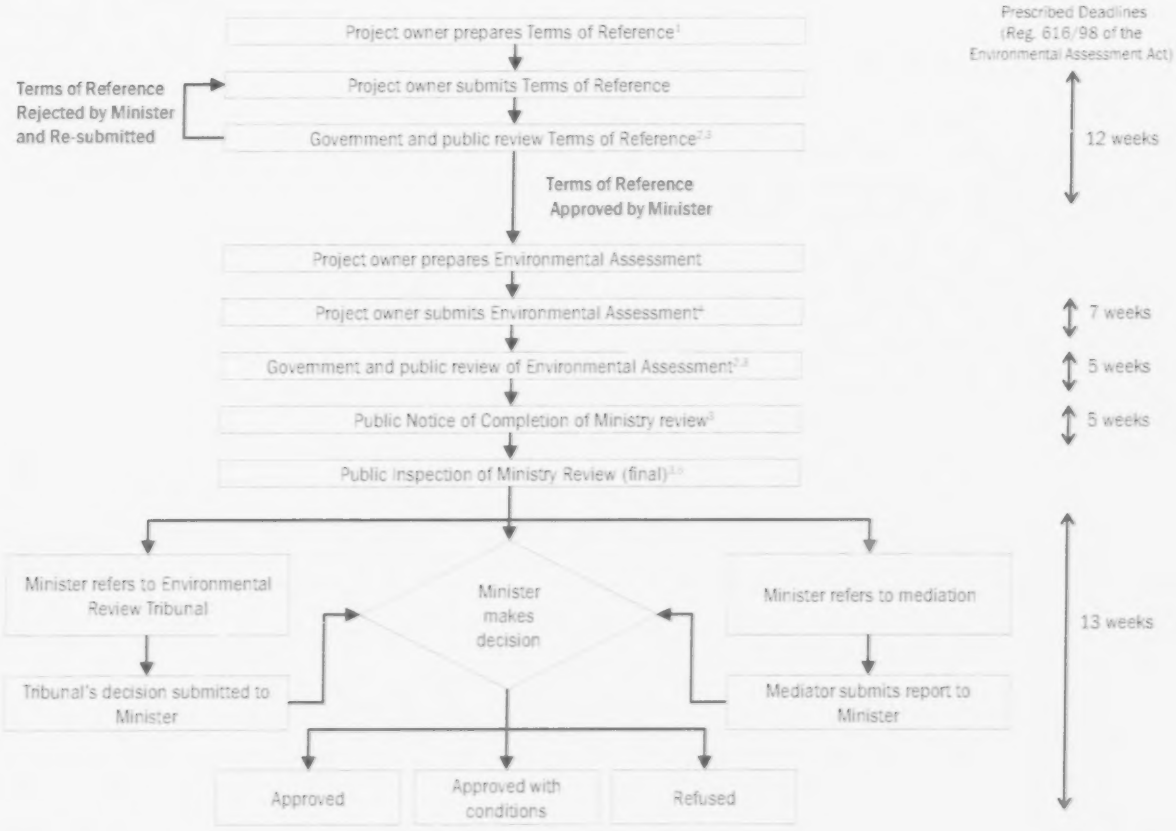
#	Project Name and Location	Description of Project	Project Owner	Date Environmental Assessment Was Approved	Project's Current Status
Waste Management Projects					
1	Clean Harbors Lambton Facility (St. Clair, near Sarnia)	To expand the capacity of an existing landfill by an additional 4.5 to 5.0 million cubic metres of space to extend its projected lifespan by approximately 25 years.	Clean Harbors Canada Inc.	July 2015	Construction
2	Brighton Landfill Expansion (Northumberland, near Peterborough)	To provide additional disposal capacity to an existing landfill to allow the County to continue to operate the landfill through the year 2023.	County of Northumberland	February 2015	Pre-construction
3	West Carleton Environmental Center (Ottawa)	To develop a new landfill with a total capacity of 6.5 million cubic metres as part of a waste management development complex known as the West Carleton Environmental Centre.	Waste Management of Canada	August 2013	Project operational
4	Gerdau Ameristeel Recycling Shredder By-Product Disposal Site (Whitby)	To expand the on-site landfill and provide for future extraction, recovery and re-use of landfilled material for use in the steel mill operation or for the production of saleable products.	Gerdau Ameristeel	March 2013	Construction
5	Maple Lake Landfill Site Expansion (Haliburton County)	To expand the existing waste disposal site to accommodate waste for the next 25 years.	Township of Algonquin Highlands	March 2011	Pre-construction
6	Hanover/Walkerton Landfill Expansion (Municipality of Brockton)	To expand the existing Hanover/Walkerton landfill to provide an additional 347,000 cubic metres of disposal capacity for municipal waste to service the Hanover and Walkerton communities for 25 years.	Town of Hanover/ Municipality of Brockton	March 2011	Operational
7	Moosonee, Town Landfill Expansion (Township of Horden, northern Ontario)	To expand the existing Moosonee Area Development Board landfill to provide additional waste disposal capacity for 40 years.	Town of Moosonee	December 2010	Pre-construction
8	Durham and York Residual Waste Study (Municipality of Clarington)	To construct and operate a thermal treatment waste management facility.	Regions of Durham and York	November 2010	Operational
Transportation					
9	Markham Bypass Extension - Donald Cousens to Morningside Avenue (Markham)	To construct a four-lane urban arterial roadway extension and widen roadways.	Regional Municipality of York	January 2013	Project awaiting funding finalization

#	Project Name and Location	Description of Project	Project Owner	Date Environmental Assessment Was Approved	Project's Current Status
10	Western Vaughan Transportation Improvements (Vaughan)	To widen various roadways on the western half of the City of Vaughan.	City of Vaughan	July 2012	Pre-construction
11	Highway 427 Extension Transportation Corridor (Vaughan)	To construct a 6.6 kilometre extension of Highway 427, new interchanges, and a dedicated transitway.	Ministry of Transportation	October 2010	Pre-construction
12	MTO Highway 407 East Extension (Region of Durham)	To extend Highway 407 from Brock Road to Highway 35/115, and construct a dedicated transitway corridor and 17 transitway stations.	Ministry of Transportation	March 2010	Operational Phase 1 is operational and Phase 2 is under construction
Electricity-Generation for Mining Operations					
13	Detour Lake Contingency Power Project (Cochrane, northeast Ontario)	To install diesel-fired generators capable of supplying 10 megawatts of power to the Detour Lake mine site.	Detour Gold Canada Corporation	March 2012	Project not going forward
14	Musselwhite Mine–Main Power Supply Project–Power System Expansion (103 km north of Pickle Lake, Northern Ontario)	To provide up to 20 megawatts of diesel generated electrical capacity at the existing Musselwhite Mine.	Goldcorp Canada Ltd.	November 2010	Pre-construction
15	Detour Lake Power Project (185 km northeast of Cochrane, northeast Ontario)	To construct a transmission line and related infrastructure to provide power to the Detour Lake mine site in northeastern Ontario.	Detour Gold Corporation	March 2010	Operational
Waterfront Development					
16	Lakeview Waterfront Connection Environmental Assessment (Mississauga)	To create a new natural park that will establish ecological habitat and public access on the eastern Mississauga waterfront.	Credit Valley Conservation and Region of Peel	May 2015	Pre-construction
17	Goderich Harbour Expansion (Goderich)	To provide additional loading/unloading space for ships; additional storage space of salt as well as other commodities; and provide for wind and wave protection to the inner harbour.	Town of Goderich	November 2014	Construction
18	City of Quinte West Waterfront Development (Marina) (Quinte West)	To develop a new municipal marina facility near the entrance of the Trent-Severn Waterway.	City of Quinte West	March 2014	Construction

#	Project Name and Location	Description of Project	Project Owner	Date Environmental Assessment Was Approved	Project's Current Status
Flood Protection					
19	Don Mouth Naturalization and Port Lands Flood Protection Project (Toronto)	This project will transform the existing mouth of the Don River (the "Don Mouth") including the Keating Channel, into a healthier, more naturalized river outlet to the Toronto Inner Harbour and Lake Ontario, while at the same time removing the risk of flooding to over 290 hectares of urban land to the east and south of the river.	Toronto and Region Conservation Authority	January 2015	Pre-construction
Mining					
20	Rainy River Gold Mine (Township of Chapple)	To construct, operate and eventually reclaim an open pit and underground gold mine.	Rainy River Resources	January 2015	Construction

Appendix 4: Submission and Approval Process for Comprehensive Environmental Assessments

Source of data: Ministry of the Environment and Climate Change


Prescribed Deadlines (Reg. 616/98 of the Environmental Assessment Act)
Project owner prepares Terms of Reference[1]
Project owner submits Terms of Reference
Terms of Reference Rejected by Minister and Re-submitted
Government and public review Terms of Reference[2,3]
12 weeks
Terms of Reference Approved by Minister
Project owner prepares Environmental Assessment
Project owner submits Environmental Assessment[4]
7 weeks
Government and public review of Environmental Assessment[2,3]
5 weeks
Public Notice of Completion of Ministry review[3]
5 weeks
Public Inspection of Ministry Review (final)[3,5]
Minister refers to Environmental Review Tribunal
Minister makes decision
Minister refers to mediation
13 weeks
Tribunal's decision submitted to Minister
Mediator submits report to Minister
Approved
Approved with conditions
Refused

1. The Terms of Reference describe how the project owner will conduct the environmental assessments, and includes: a description of the proposed project; the current conditions in the area where the project is to be located; the alternatives that will be examined; the studies that will be conducted to evaluate the alternatives; and how the public will be consulted.
2. The Terms of Reference and the Environmental Assessment report are reviewed by a Government Review Team that is made up of staff from municipal, provincial and federal government ministries and agencies who provide comments based on their mandated authority and expertise. For example, the Ministry of Natural Resources and Forestry will provide comments regarding the protection of species-at-risk.
3. All public notices are placed in local newspapers, provided to stakeholders who may be directly affected through direct mail, and/or posted on the project owner's website. Notices are also placed on the Ministry's website.
4. The Ministry publishes the results of its review of the Environmental Assessment report, after which the public has an opportunity to provide comments on the Ministry's review.
5. The Environmental Assessment report describes the results of the project owner's assessment (such as the scientific studies, evaluation of alternatives, public consultation, etc.) to support the action it recommends regarding the proposed project.
6. The Ministry attaches legally binding conditions to the approved environmental assessment report that apply to the entire project from design through implementation and operation, and up to the future closure of the project. Such conditions may include conducting ongoing public consultation during construction, or monitoring the quality of groundwater. The Report must be approved by the Minister and Cabinet.

Appendix 5: Types of Streamlined Environmental Assessments

Prepared by the Office of the Auditor General of Ontario

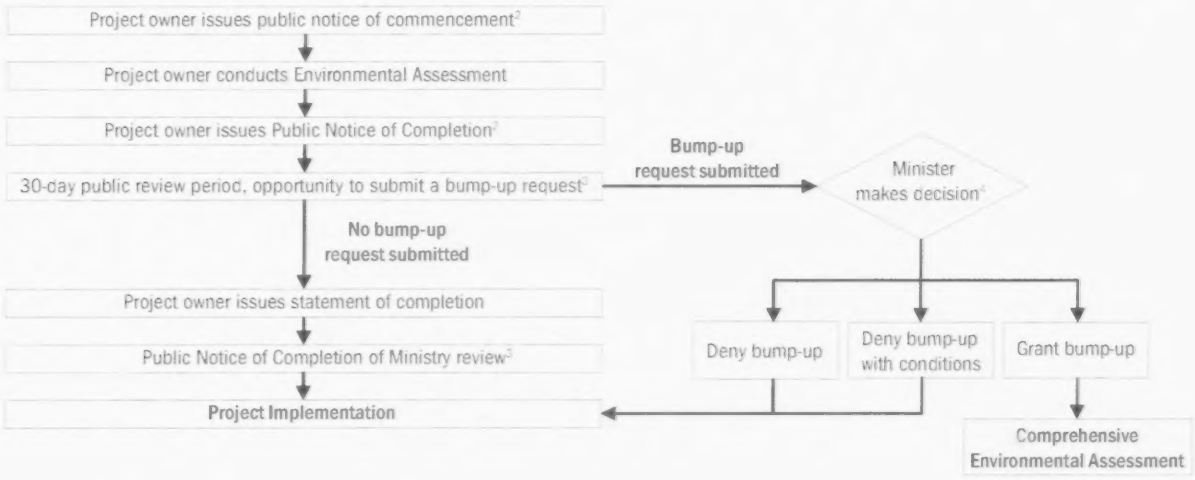
Project Owners	Types of Projects	Volume of Projects[2] (2010–2015)	% of Total
Class Environmental Assessments			
Hydro One	**Minor transmission facilities (1992)** • Transmission lines • Transmission and distribution stations • Telecommunication towers	47[3]	2
Ministry of Natural Resources and Forestry	**Forest management (1994)** • Developing Forest Management Plans for activities such as harvesting trees, construction of access roads, etc.	53[4]	3
Metrolinx	**GO Transit (1995)** • Construction of new commuter rail stations, bus terminals or storage yards • Extension of rail routes • Rail infrastructure improvements	4	<1
Ministry of Transportation	**Provincial transportation facilities (1999)** • Highway construction and maintenance	888	46
Ministry of Natural Resources and Forestry	**Resource stewardship and facility development (1999)** • Decision to grant access rights to Crown land	88	5
Municipalities	**Municipal infrastructure projects (2000)** • Municipal road, sewage and water infrastructure • Municipal transit projects	435[4]	23
Conservation Authorities	**Remedial flood and erosion control projects (2000)** • Actions taken for protection from impending flood or erosion	7	<1
Infrastructure Ontario	**Public works (2004)** • Property acquisition, planning, leasing, maintenance, construction/demolition, sale	278	14
Ministry of Natural Resources and Forestry	**Provincial parks and conservation reserves (2004)** • Create, modify or eliminate a provincial park or conservation reserve • Management projects (wildlife, vegetation, etc.) • Park operations (beaches, campgrounds, etc.) • Developing Park Management Plans	53	3
Ontario Waterpower Association	**Waterpower projects (2008)** • New waterpower projects <200 megawatts • Modifications to existing waterpower projects • Transmission lines <115 kilovolts • Transformer/distribution centres >115 kilovolts	8	<1
Ministry of Northern Development and Mines	**Mining (2012)** • Abandoned mine rehabilitation • Decisions to grant licences to mining companies to conduct exploratory activities	16	1
Subtotal–Class Environmental Assessments		**1,877**	**98**

Project Owners	Types of Projects	Volume of Projects[1] (2010–2015)	% of Total
Regulated Environmental Assessments			
Examples include: • Bracebridge Generating Ltd. • Ontario Graphite Ltd. • C.P.V. Nanticoke Energy LP	**Electricity generation (2001)** • Wilson's Falls generating station • Kearney Graphite Mine power generation • Nanticoke Energy Centre	18	1
Examples include: • Plasco Energy Group • Niagara Waste Systems Ltd. • Altlantic Power	**Waste management (2007)** • Waste conversion facilities • Atlas landfill remediation • Calstock power plant–ash landfill expansion	7	<1
Examples include: • Metrolinx • Municipal transit authorities (e.g., Toronto Transit Commission)	**Public transit (2008)** • Eglinton Crosstown LRT • Scarborough Rapid Transit conversion and extension • Transit maintenance facilities	23	1
Subtotal–Regulated Environmental Assessments		**48**	**2**
Total Streamlined Assessments		**1,925**	**100**

1. Unless indicated otherwise (see Notes 2–4), figures are based on annual reports submitted by project initiators to the Ministry.
2. The class EA framework for minor transmission projects does not require Hydro One to submit annual reports to the Ministry. The volume of projects is an estimate obtained by OAGO directly from Hydro One.
3. The volume of projects for the Forest Management Class EA is based on the number of times various forest management plans have been subject to public review in the last five years. This Ministry does not track the number of class EA processes by any other means.
4. The volume of projects for the Municipal Infrastructure Class EA is based on figures in the annual reports to the Ministry (2011–12) and the number of notices regarding projects that were received by the Ministry's head office from municipalities (2013–15).

Appendix 6: Streamlined Environmental Assessment Process[1]

Prepared by the Office of the Auditor General of Ontario


Project owner issues public notice of commencement[2]
Project owner conducts Environmental Assessment
Project owner issues Public Notice of Completion[2]
30-day public review period, opportunity to submit a bump-up request[3]
Bump-up request submitted
Minister makes decision[4]
No bump-up request submitted
Project owner issues statement of completion
Public Notice of Completion of Ministry review[3]
Project Implementation
Deny bump-up
Deny bump-up with conditions
Grant bump-up
Comprehensive Environmental Assessment

1. The above figure illustrates the general process followed for streamlined environmental assessments. The process–as outlined in the relevant Class Environmental Assessment Policy Document or regulation under the *Environmental Assessment Act*–may vary slightly depending on the type and scale of the project.
2. Project owners must notify relevant government agencies at the start and completion of the environmental assessment. Notices are also made public through local newspapers and/or provided to stakeholders who may be directly affected through direct mail, etc.
3. After the project owner issues the Notice of Completion, members of the public, the Ministry, and other interested parties have the opportunity to review the environmental assessment report and request that the Minister bump up a streamlined project to a comprehensive assessment.
4. Class Environmental Assessment Policy Documents and the regulations under the Environmental Assessment Act prescribe timelines for the Minister's decision.

Appendix 7: Other Stakeholders in the Environmental Assessment Process

Prepared by the Office of the Auditor General of Ontario

Note: The following list is not exhaustive, and includes only those that are mentioned in our report.

Federal Government

Three agencies administer environmental assessments at the federal level:

- The National Energy Board administers the environmental assessments for designated projects they regulate such as pipelines and transmission lines.
- The Canadian Nuclear Safety Commission administers the environmental assessments for designated projects they regulate such as nuclear projects.
- The Canadian Environmental Assessment Agency (CEAA) administers the environmental assessments for all other designated projects such as airports, marine terminals and mines.

The scope of the federal assessment includes the impact on components of the environment that are within the federal legislative authority: fish and fish habitat, migratory birds, federal lands and Indigenous peoples.

In 2004, Ontario entered into an agreement with CEAA to co-ordinate environmental assessment processes when projects require both provincial and federal assessments. Since then, these 10 projects have been subject to a co-ordinated provincial-federal environmental assessment (most of which are mining projects):

- Bending Lake Iron Mine/Josephine Coal Mine (in progress since 2012)
- Cote Gold Mine (in progress since 2013)
- Detour Lake Mine Project
- Hammond Reef Gold Mine (in progress since 2011)
- Hardrock Gold Mine (in progress since 2014)
- Noront Multi-Metal Mine (in progress since 2011)
- Rainy River Gold Mine
- Detroit River International Crossing
- Highway 407 East Extension
- Western Vaughan Transportation Improvements

Environmental Review Tribunal

The Environmental Review Tribunal (Tribunal) is an independent administrative tribunal. It functions as a quasi-judicial body, whose primary role is adjudicating applications and appeals under 11 different environmental statutes, including the *Environmental Protection Act*, *Ontario Water Resources Act*, *Environmental Assessment Act* and *Environmental Bill of Rights*.

The Tribunal holds public hearings to assess the merits of proposed development projects, plans or programs that may impact the environment. For example, the Tribunal hears appeals arising from decisions regarding the issuance, alteration or revocation of an order or approval under the *Environmental Protection Act*, *Ontario Water Resources Act*, and *Environmental Assessment Act*.

Environmental Commissioner of Ontario

The Environmental Commissioner of Ontario reports to the Legislative Assembly under the authority of the *Environmental Bill of Rights*. The Commissioner is responsible for reviewing and reporting on the government's compliance with the *Environmental Bill of Rights*.

Ontario Municipal Engineers Association

The Ontario Municipal Engineers Association is an association of public-sector professional engineers employed in municipalities. The class EA

framework for municipal infrastructure projects is prepared by the Association on behalf of the municipalities.

Residential and Civil Construction Alliance of Ontario

The Residential and Civil Construction Alliance of Ontario is an alliance of key industry stakeholders from the residential and civil construction industry, which was created to address the major challenges affecting the construction industry.

Canadian Council of Ministers of the Environment

The Canadian Council of Ministers of the Environment is made up of the 14 environment ministers from the federal, provincial and territorial governments. The Council normally meets at least once a year to discuss national environmental priorities and determine work to be carried out to achieve positive environmental results.

Appendix 8: Chronology of Plan and Project Implementation

Prepared by the Office of the Auditor General of Ontario

LONG-TERM GOVERNMENT PLANS[1]

1. Plan Development	2. Plan Implementation

The responsible government ministry or agency conducts an environmental assessment while developing the plan.
For example, an environmental assessment of a long-term energy plan should:
• Identify reasonable and viable ways to achieve the objectives of the plan[2]:
  ◦ **Reasonable alternatives** are those that take into account the environmental and socio-economic evidence as well as legislative and policy requirements. For example, different energy supply options under different scenarios (e.g., differing electricity demands based on population projections).
  ◦ **Viable alternatives** are those that are technically and economically feasible, supported by stakeholders and the public, and can be implemented within the plan period.
• Assess and mitigate the **cumulative effects** of multiple energy projects.
• Balance environmental, societal and economic **benefits and costs** of the alternatives.
	Individual projects identified in the plan are implemented.
	Some action items in the plan are administrative, such as updating regulations and policies, and will not result in physical projects.
	Other action items, such as construction of energy-from-waste facilities, will result in physical projects. These projects will then undergo project-specific environmental assessments (see below).

INDIVIDUAL PROJECTS

1. Project Planning	2. Project Construction	3. Project Operation
The project owner conducts an environmental assessment for the proposed project. For example, an environmental assessment for a facility that converts waste to energy will: • Identify **alternative** technologies that can be used, alternative locations for the project. • Assess the **environmental, human health, cultural and socio-economic effects** of the project. • Hold the project owner accountable for **commitments** made to mitigate the negative impact of the project.	**The project owner obtains other regulatory approvals and permits.** Once the environmental assessment for the energy-from-waste facility is approved and before construction begins, the project owner must obtain, for example: • Municipal permits to build the facility, discharge sewage to the municipality's storm sewers, operate beyond standard work hours, etc. • Environmental approvals to emit contaminants emissions into air, water, or land. • Permit to Take Water from groundwater resources during construction. • Ontario Energy Board licence to generate and sell electricity.	**Project begins operations.** The municipal, provincial and federal approvals and permits outline terms and conditions for operation that the project owner must comply with once the project begins operating.

1. The example of an environmental assessment for a long-term energy plan is provided for illustration only. Although the *Environmental Assessment Act* requires an environmental assessment for public-sector proposals, plans and programs, no such assessment has been conducted for any long-term government plan since 1992.
2. Based on best practices promoted by the International Association for Impact Assessment–the leading international organization for best practices related to environmental assessments.

Appendix 9: Comparison of Ontario's Environmental Assessment Process to Other Canadian Jurisdictions

Prepared by the Office of the Auditor General of Ontario

	Ontario	Canada	British Columbia	Alberta	Saskatchewan	Manitoba	Northern Quebec	Southern Quebec
Applicable legislation	*Environmental Assessment Act*	*Canadian Environmental Assessment Act, 2012*	*Environmental Assessment Act*	*Environmental Protection and Enhancement Act* and the *Water Act*	*Environmental Assessment Act*	*Environment Act*	*Environmental Quality Act*, James Bay and Northern Quebec Agreement, and the Northeastern Quebec Agreement	*Environment Quality Act*
Year legislation was first passed	1976	1992[1]	2002	1993	1980	1987	1980	1980
Does the Act apply to private sector projects?	Only for electricity-generation and transmission and waste-management[2]	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Is environmental assessment required for mining projects?	No[3]	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Does the Act allow streamlined environmental assessments?	Yes	No	No	For oil sand mines, industrial plants, and coal mines	No	Yes	Projects may be determined to not require a full EA	No
Are project owners required to assess the cumulative effects of projects?	No	Yes	Yes	Yes	Yes	No	Yes	Yes
Is there an independent body to provide advice to the Minister?	No	Yes	No	For energy projects	No	Yes	Yes	Yes

	Ontario	Canada	British Columbia	Alberta	Saskatchewan	Manitoba	Northern Quebec	Southern Quebec
Does the Ministry/Agency conduct site inspections?	No	Yes	Yes	No	Yes	Yes	Yes	Yes
Does the environmental assessment website contain:								
• a list of all projects that have undergone, or are currently undergoing, an environmental assessment	Some	Yes	Yes	Yes	Some	Some	Yes	Some
• all relevant documentation produced by the project owner	Some	Yes	Yes	Yes	Some	Some	No	Some
• all relevant documentation produced by the Ministry/Agency	Some	Yes	Yes	Yes	Some	Some	No	Some

1. The *Canadian Environmental Assessment Act* was first passed in 1992. The current *Canadian Environmental Assessment Act, 2012* was passed as part of the 2012 Budget Implementation Bill, Bill C-38.
2. The *Environmental Assessment Act* also allows private-sector project owners to voluntarily conduct an environmental assessment.
3. Certain components of a mining project—such as the construction of a road leading to the mine or its electricity generation facility—may require a streamlined environmental assessment.

Ministry of Health and Long-Term Care

Housing and Supportive Services for People with Mental Health Issues (Community-Based)

1.0 Summary

The shift from institutional to community mental health services and supports that began in the late 1990s and continued in the decade that followed has increased the need for mental health supportive housing in Ontario. Under four supportive housing programs funded by the Ministry of Health and Long-Term Care (Ministry), the Ontario government subsidizes over 12,300 housing units and funds support services to individuals with serious mental illness who have housing needs. Mental health supportive housing is especially important to those who are homeless or staying in places that may not be promoting their recovery, or who have just been discharged from hospitals. The programs are delivered by mental health housing and support services agencies that contract with the Ministry and/or the Local Health Integration Networks (LHINs) that have a mandate to plan, fund and integrate health services, including mental health services, in 14 geographic areas within Ontario.

Supportive housing includes two components—housing and support services. The Ministry funds and monitors housing, while the LHINs fund and monitor support services. Support services are provided to help housing clients cope with their mental illness and stay housed. They may include case management, counselling and vocational supports. Housing agencies deliver these services to their clients either on their own or in partnership with other mental health agencies.

In 2014, the Ministry created the Mental Health and Addictions Leadership Advisory Council (Council) to help the government move forward with its mental health and addictions strategy, *Open Minds, Healthy Minds*, which was launched in 2011. The Council considers supportive housing a priority area, and will be making recommendations to the Ministry by 2017 on actions needed to meet the objectives of the strategy.

Providing supportive housing for people with mental health challenges who require housing makes economic sense. With the right housing and supports, people recovering from mental illness gain a renewed sense of dignity and hope, and can reintegrate into the community more successfully. Research shows that providing a home to people with mental health challenges can help save money in the long run in hospital, prison and shelter stays, and in other ways as well. One study found that for every $10 invested in housing and supporting a client, an average saving of $15.05 for a high-needs

client and $2.90 for a moderate-needs client can be realized.

Our audit found that the Ministry, the LHINs and service providers do not have adequate information, systems and procedures in place to cost-effectively oversee, co-ordinate and deliver housing with support services to people with mental illness. They also do not sufficiently measure and publicly report on the effectiveness of Ontario's mental health supportive housing programs. Consistent with concerns our Office raised in previous audits of community mental health in 2002 and 2008, and our subsequent follow-up on the latter audit in 2010, we continue to find that the Ministry does not have consolidated information on the demand for mental health supportive housing in the province, does not assess the cost-effectiveness of the four mental health housing programs (as described in **Appendix 1**), and does not measure the outcomes of individuals housed. Similarly, LHINs do not know what types of support services are provided to housing clients on an annual basis, how effective they are, and whether clients are satisfied with supportive housing. The lack of a housing policy framework to guide the provision of mental health supportive housing contributes to the Ministry's and the LHINs' difficulty in sufficiently overseeing and co-ordinating the delivery of supportive housing services to Ontarians.

We also found that clients living in ministry-funded housing may not be receiving similar services across the province. As well, without information on the demand for mental health housing the Ministry cannot set and has not set any goals for how many mental health supportive housing units are to be made available to those in need, and has not developed a housing policy, despite having identified this as an area of need in its own 1999 mental health policy framework. We also found that without standards and expectations, the Ministry cannot reasonably ensure that its funding is contributing to good-quality supportive housing services that meet the needs of clients. Similarly, LHINs have not prescribed the types and duration of support services that should be available to housing clients at different points in their recovery path, and do not require agencies to report aggregate client assessment information to determine areas of unmet needs.

Providing mental health housing with support services can help reduce inequities and allow people living with mental illness to reach their full potential. With limited resources available, the province needs to make careful choices to provide mental health supportive housing to those who would benefit most from it. This could mean some who are currently receiving mental health supportive housing might need to transition to other forms of housing, such as those that are not tied to support. Doing so would help the Ministry focus on providing the available housing and supports to those who have nowhere else to go and have the greatest need for mental health supportive housing, so they can have a better chance to move on with their lives. But it is important that governments have plans in place to connect clients who could live independently to community support services should they need them over the course of their lives, regardless of where they live. This approach has been in place in parts of the United States and has resulted in people continuing to live independently for years after they initially received mental health supportive housing.

Following are some of our significant observations:

- **The Ministry identified the need to develop a policy on housing as early as 1999, but no such policy has been developed since then.** The Ministry and three other ministries (the Ministry of Housing, the Ministry of Children and Youth Services, and the Ministry of Community and Social Services) together operate 14 housing programs in Ontario. Some of these serve seniors, victims of violence and people with chronic illnesses. In 2014, the four ministries together began to transform this fragmented housing system in the long term. At the time of our audit, the four ministries were working on a supportive housing

framework to guide better alignment of existing and/or planned housing initiatives; they intended to release it publicly by early 2017. Since the ministries expect to implement the framework in 10 years, changes in the housing system may not be completely realized until almost three decades since the Ministry first identified the need for a housing policy.

- **The Ministry does not have consolidated regional or agency wait-list information.** Not all LHINs have regional wait lists, and the Ministry does not require housing agencies to maintain wait lists. Without a clear picture of the need for mental health supportive housing in each LHIN region, the Ministry cannot effectively plan for the allocation of housing stock in the province. In any event, the Ministry does not set goals with timelines on how many mental health supportive housing units it needs to fund in the long run.
- **People usually move from the wait list into available housing in the order in which they applied.** People who are ready to be discharged from hospitals but have nowhere to go do not get priority over others in accessing mental health supportive housing, even though the cost of a hospital bed can be as much as nine times the cost of providing supportive housing. Also, those with a higher level of needs, such as 24/7 care including meal preparation or medication management, have difficulty getting into the first available housing because not all units are structured to allow for such levels of care. Individuals who have mobility issues also tend to have longer waits because some units are not outfitted with accommodation that would meet their needs. Meanwhile, shared units remain vacant for up to 39 months because clients usually prefer not to share a unit. The Ministry does not know how many shared units it funds in Ontario.
- **The Ministry considers mental health supportive housing as long term and permanent.** Clients living in Ministry-funded supportive housing consider their house or unit their permanent home. But some supportive housing clients no longer need or want support services. This practice contradicts the principle of supportive housing, which includes an element of support services. One housing agency we visited proposed to the Ministry that there be a continuum of housing, so individuals whose level of support needs changes over the course of tenancy can step up to higher-support housing if necessary, or transition to other settings, such as the private market or social housing, once they stabilize. However, at the time of our audit, the Ministry had not provided any direction to agencies to guide transitioning efforts.
- **The Ministry's approach to mental health supportive housing by default creates a backlog in accessing available housing.** There is no certainty on when occupied units will next become available since supportive housing is permanent housing. Wait times to access mental health supportive housing can be up to seven years in the regions we visited.
- **The Ministry is starting to make progress in updating two older housing programs (Homes for Special Care and Habitat Services) that no longer follow best practices.** Eighty percent of the units in Ontario's mental health supportive housing are provided to individuals living with mental illness under two of the four ministry-funded mental health supportive housing programs, where not-for-profit agencies either own the units, purchased with government funding, or rent from the private market with subsidies from the Ministry. The remaining 20% of the units are in these two older programs that were created decades ago and do not follow current best practices, as they primarily provide room and board only but no significant rehabilitative support services. At the time of our audit, the Ministry was beginning to review one program, and has allowed changes to the other.

We are encouraged to see the Ministry go in this direction, having previously noted in our 1987 audit that residential care homes (which primarily provide room and board) for the mentally ill were not the best housing choice given that they were not required to provide support services.

- **The Ministry's subsidy payments to agencies may not be appropriately geared to tenants' ability to pay their rent.** The Ministry paid just over $100 million in 2015/16 to housing agencies to operate over 12,300 housing units in Ontario, but did not appropriately monitor whether agencies verified tenants' income levels. We found that income was not verified at the required intervals at six of the seven housing agencies we visited. As well, the Ministry did not require housing agencies that own properties containing housing units to conduct building-condition audits, which would have informed both the agency and the Ministry if the capital reserve is in an unfunded liability position (meaning that the agencies lack the reserve funds to pay for needed major repairs and renovations). This could potentially raise issues of safety for clients living in these buildings, and financial exposure for the Ministry, which funds the capital reserve.
- **LHINs do not confirm whether appropriate support services are delivered to housed tenants.** LHINs do not know whether agencies provide these various support services, whether all housing clients receive support services, and whether clients living in one area of the province receive comparable service hours to clients with similar needs living in another area. LHINs give agencies full discretion to deliver to their housing clients whatever support services they deem proper and at whatever frequency and level of service.
- **The Ministry does not collect outcome information on housing clients to determine whether clients live independently and achieve recovery.** The Ministry collects output-based information, such as how many units are occupied but does not collect outcome data, such as if clients' visits to hospitals or encounters with the justice system have decreased, or whether their ability to function has improved. The need to collect outcome data has been identified in many public reports, including the 1999 government implementation plan for mental health reform, and the 2010 report by the Ontario Legislature Select Committee on Mental Health and Addictions. The Mental Health and Addictions Leadership Advisory Council noted in 2015 that it will work on creating a common data set. In other words, the issue of not having outcome data is still not resolved almost two decades after the government itself acknowledged this concern.

In the last three years, the Ministry has been moving in the right direction—it established a cross-ministry working group and a leadership advisory council to address specific issues with mental health supportive housing. But these issues, in areas such as the types of support services, outcome data, housing model and best practices sharing, have already been identified in many provincial reports on mental health in the last three decades. The Ministry and the LHINs can take guidance from these reports to implement changes in the way they plan, oversee and fund mental health supportive housing to ensure housing and support services providers deliver the program to clients requiring such services in a purposeful way.

This report contains 14 recommendations, consisting of 34 actions, to address our audit findings.

OVERALL MINISTRY RESPONSE

The Government of Ontario recognizes that housing is an important social determinant of health and that supportive housing is a critical part of meeting the government's commitments

to reduce poverty and to end chronic homelessness by 2025. It is a proven model for cost-effectively providing housing and services to some of Ontario's most vulnerable citizens. For many, supportive housing is a stepping stone to recovery, greater independence and success in the community.

Four ministries—Health and Long-Term Care, Housing, Community and Social Services and Children and Youth Services—are responsible for 14 supportive housing programs in Ontario. They are working together to reduce barriers to service, increase co-ordination between ministries and systems, and deliver more housing and support services to the people who need them. The Ministry of Health and Long-Term Care (Ministry) has increased its supply of supportive housing by 46% in the last decade. As well, the government is investing in supportive housing—for example, the Ministry invested $16 million to create 1,000 spaces over the past three years.

The government recognizes that improving the supportive housing system is not only about investing more; it is also about investing smarter. That's why the Ministry is working with its three partner ministries and stakeholders to develop programs and services that are evidence-based, committed to continuous improvement, and support the long-term sustainability of the system.

OVERALL LHINS' RESPONSE

Local Health Integration Networks (LHINs) as health system planners, funders and integrators will continue to support initiatives that create more timely access to services and to create greater consistency with respect to outcomes and quality. The three participating LHINs subject to this audit (North West, Toronto Central and Waterloo Wellington) welcome the recommendations along with the Ministry, agencies and clients to strengthen and transform the mental health supportive housing system.

The LHINs fully support the strategic vision put forth by the Mental Health and Addictions Leadership Advisory Council (Council) that "every Ontarian enjoys good mental health and well-being throughout their lifetime, and all Ontarians with mental illness or addictions can recover and participate in welcoming, supportive communities." Phase Two of *Open Minds, Healthy Minds*, Ontario's comprehensive mental health and addictions strategy, is focused on adults, transitional-aged youth, addictions, transitions, funding reform, and performance measurement across the system. LHINs are actively working to engage sector stakeholders to collaboratively plan and implement the Council's recommendations and to inform the Council on deliverables.

In June 2015, the LHIN CEO Council approved the establishment of a Provincial Mental Health and Addictions Advisory Committee (Advisory Committee), bringing together LHINs, associations, and other partners and subject matter experts to share and exchange information, identify leading practices, advance priorities and develop recommendations to the LHIN CEO Council to support and inform the work of the Council. The Advisory Committee has endorsed three pan-LHIN mental health and addictions priorities: ensure accessible and appropriate primary care for those experiencing mental health and addictions conditions; ensure better co-ordinated, centralized and integrated access points for mental health and addictions services; and ensure availability of flexible service support housing options for key populations. Action-oriented work groups have been formed around each of the three pan-LHIN priorities with the mandate to develop, document and implement work plans to create change and positively impact the health and well-being of Ontarians affected by mental health and addictions issues.

2.0 Background

Refer to **Chapter One** for further background on mental health in Ontario.

2.1 What Is Supportive Housing?

The shift from institutional to community mental health services that started in the late 1990s and continued over the next decade has increased the need for mental health supportive housing (that is, housing for mental health clients with support services) in Ontario. The Mental Health and Addictions Leadership Advisory Council (Council), established in 2014 by the Ontario government to work toward the objectives set out in the province's mental health and addictions strategy, *Open Minds, Healthy Minds* (2011), defined supportive housing as "the combination of a safe and stable home with the offer of additional supports that enable a person to stay in their home, live independently, and/or achieve recovery." Housing, education, employment and income, called the four social determinants of health, affect people's sense of competence and connection to others. The Council considers supportive housing to be a priority area of its work.

The term "supportive housing" includes two elements—housing and support services:

- Housing represents the bricks and mortar of supportive housing, and can come in different forms, such as self-contained units, rooming or boarding houses, shared living (for instance, two or more people sharing a house or apartment) or congregate living (where an agency worker maintains a presence to provide needed support to tenants).
- Support services help clients remain housed, and can vary in nature and scope as they respond to the needs of the individual. Examples include social supports (such as life skills, peer support, resident group support and conflict resolution); clinical supports (such as crisis support, case management, counselling, outreach nursing and assertive community treatment teams); and other supports (such as 24-hour support to ensure a stable housing environment, assistance with daily living activities, medication management, assistance with job searches, employment support, house cleaning, meal preparation, child care, individualized planning, and matching individuals to appropriate housing).

Mental health supportive housing, unlike social housing, is designed for clients who have a mental illness and need to be provided with support services as part of their living arrangement. In contrast, social housing is rent-geared-to-income housing aimed at assisting low-income individuals or families, and is not intended for people with mental illness. Also, with social housing, supports are not guaranteed unless there is an established program with the municipality or the Local Health Integration Network (LHIN) region, or if the individual is already connected to a mental health service provider.

2.2 Who Needs Mental Health Supportive Housing?

People with serious mental illness are at an increased risk of poverty and homelessness. It is estimated that one in 40 Ontarians will have a serious mental illness at some point in his or her life. People with serious mental illness have a diagnosis of mental illness such as schizophrenia, depression, bipolar disorder or personality disorder; a long duration of illness; and a significant disability in day-to-day functioning. (These are often referred to as the "three Ds.") According to a study in the health and housing status of homeless and vulnerably housed adults in Ontario and British Columbia conducted by a national, interdisciplinary alliance of research partners (including hospitals, universities and not-for-profit agencies), more than half of the homeless and vulnerably housed adults in Vancouver, Toronto and Ottawa in 2010 reported a past diagnosis of a mental health problem.

Not all individuals who experience mental health issues have housing challenges or are in need of mental health supportive housing. For example, those who can cope with the illness, live independently or with their family, and access mental health and other services in the community do not need this extra level of support. However, for some individuals, such as those leaving the hospital after a long stay, this type of specialized housing with supports can help them establish themselves and reintegrate into the community.

People who live in mental health supportive housing interact with multiple parties who each play a role in supporting the individual to recover from mental illness and stay housed, as shown in **Figure 1**.

2.3 Benefits of Mental Health Supportive Housing

There are many benefits of mental health supportive housing. Studies conducted in Ontario and in other provinces have shown that people with mental illness who are in supportive housing experience a reduction in hospital readmissions, psychiatric symptoms and substance abuse; improved housing and financial stability; and overall better quality of life.

People who live with mental illness and receive supportive housing services can gradually gain independence in their day-to-day functioning; some have become advocates for the mentally ill and have taken positions as tenant board members serving on the boards of the agencies that provide them with their housing. **Figure 2** provides two real-life examples of client experiences in Ontario's mental health supportive housing and the positive impact the program has had on their lives.

In 2014, the Mental Health Commission of Canada (Commission) reported on a project that used a "housing first" approach in Toronto to try to end homelessness for those living with mental illness. It said the project demonstrated that money was saved by providing housing to these clients over a two-year period. The Commission found that for every $10 invested in housing and supporting a client, an average saving of $15.05 for a high-needs client and $2.90 for a moderate-needs client can be realized. The savings come out of areas such as psychiatric hospital stays, home and office visits with health or social service providers, prison stays and shelter stays.

2.4 Types of Mental Health Supportive Housing in Ontario

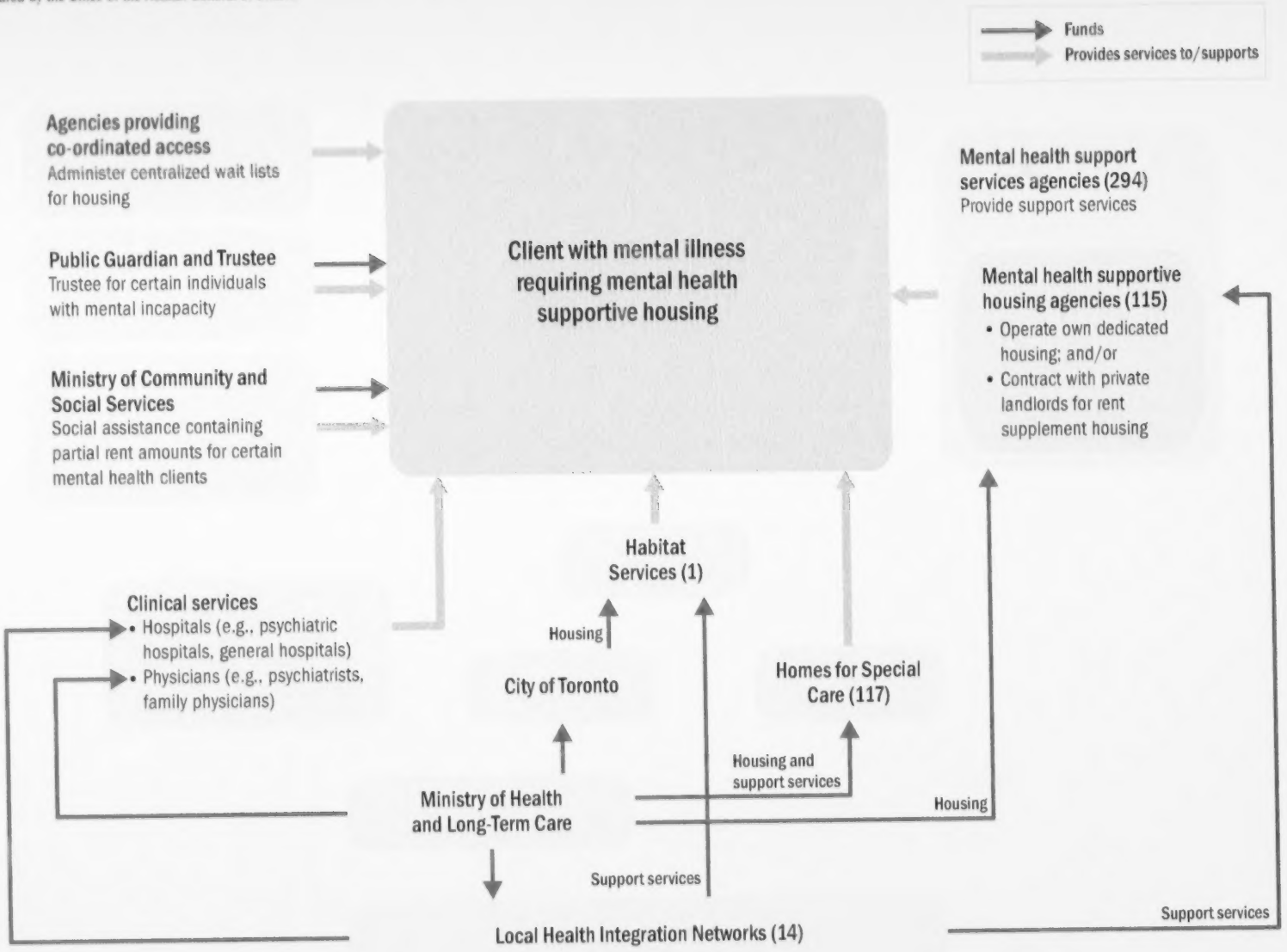
As of March 31, 2016, the Ministry of Health and Long-Term Care (Ministry) was providing funding to over 12,300 supportive housing units under four different broad housing programs to serve those with serious mental illness. The four programs—dedicated housing, rent supplement, Homes for Special Care, and Habitat Services—were first established between 1964 and 2000. While all of the programs are intended to serve people with mental illness, some are targeted to serve specific sub-populations, such as those also with current involvement in the criminal justice system, developmental disability, or substance abuse issues. About 80% of all mental health housing units are provided under the first two programs, operated by 115 housing agencies, and the remaining 20% are provided under the last two programs. **Appendix 1** shows the characteristics of each of these housing programs.

2.5 Funding

For the dedicated housing and rent supplement programs, the Ministry provides funding directly to the 115 not-for-profit housing agencies for the housing component (that is, the "bricks and mortar"). In addition, through the province's 14 Local Health Integration Networks (LHINs), the Ministry funds the same agencies to provide supports. If a housing agency cannot provide the necessary support services to its mental health clients, it partners with another agency, also funded by LHINs, that specializes in providing these services.

Figure 1: Roles and Responsibilities of Key Parties Involved in Mental Health Supportive Housing

Prepared by the Office of the Auditor General of Ontario


Funds
Provides services to/supports
Agencies providing co-ordinated access
Administer centralized wait lists for housing
Public Guardian and Trustee
Trustee for certain individuals with mental incapacity
Ministry of Community and Social Services
Social assistance containing partial rent amounts for certain mental health clients
Client with mental illness requiring mental health supportive housing
Mental health support services agencies (294)
Provide support services
Mental health supportive housing agencies (115)
• Operate own dedicated housing; and/or
• Contract with private landlords for rent supplement housing
Habitat Services (1)
Housing
City of Toronto
Homes for Special Care (117)
Clinical services
• Hospitals (e.g., psychiatric hospitals, general hospitals)
• Physicians (e.g., psychiatrists, family physicians)
Housing and support services
Housing
Ministry of Health and Long-Term Care
Support services
Support services
Local Health Integration Networks (14)

The Ministry provides funding directly to homeowners that operate the Homes for Special Care program, and the LHINs provide funding to nine hospitals, including the province's four specialty psychiatric hospitals, that perform inspections on these homes. Ministry funding to homeowners under this program covers housing and certain support services, in that homeowners will provide meals, assist the tenant with self-care, and arrange additional assistance.

For the Habitat Services program, the Ministry and the City of Toronto co-fund Habitat Services, a not-for-profit agency operating in Toronto, for room and meals, and the Toronto Central LHIN funds this agency for support services, and inspection and monitoring of homes.

In the year ending March 31, 2016, the Ministry spent just over $100 million on the operating and capital costs of housing, an increase of 30% since 2006/07, as shown in **Figure 3**. While the Ministry and the LHINs track and monitor the total costs of delivering mental health support services in Ontario, they cannot distinguish and estimate the amounts paid to help those living in supportive housing.

Figure 2: Examples of Client Experiences in Ontario's Mental Health Supportive Housing

Source of data: Selected mental health housing agencies

Note: The names, locations and identifying details have been changed to protect privacy.

Dianne's Story

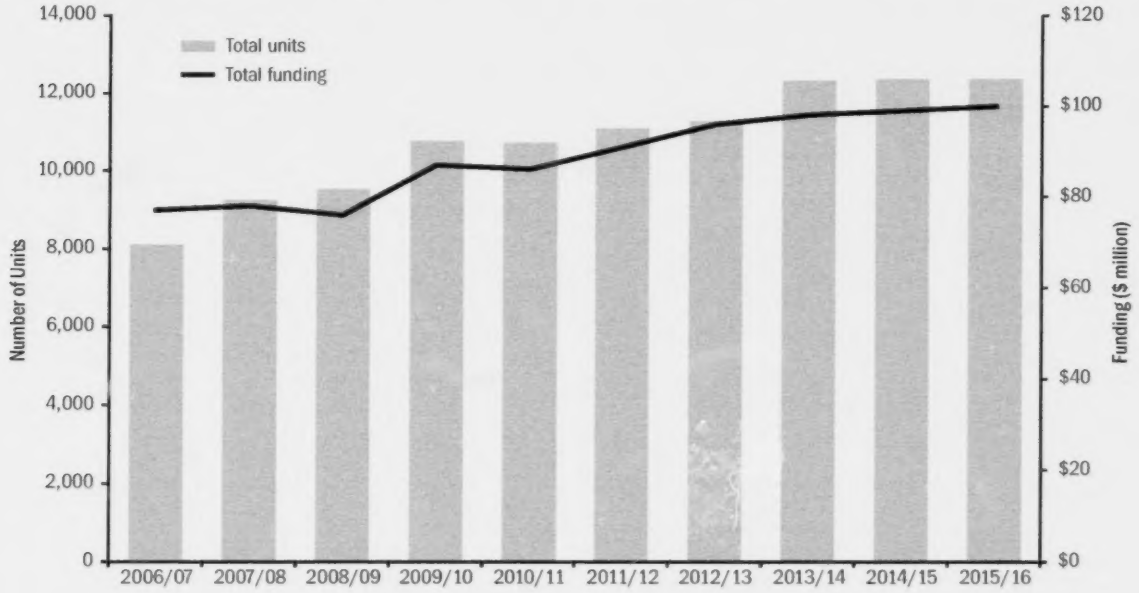
Dianne is a woman in her mid-30s, and has been affiliated with a mental health agency since 2013. She has also been living in an apartment leased to her by the agency in a small rural town in southern Ontario. Dianne was sure she was going to be homeless until she learned that this unit was available while talking to her support worker. The fear and mental health issues were unbearable to Dianne, who also has a daughter. This agency offered her security and peace and helped her build her self-esteem to get her life back together. She was receiving social assistance, and working on her mental state for two years before getting a job. At that time, things started to improve and she could start recovering from her issues. The agency workers have always been compassionate, and she doesn't think she would be where she is today without the help from the housing program and staff. She could not imagine life being as good as it has become. Dianne felt that this program essentially saved her life and helped her become the best person she can be. She knows how blessed she is to have found this organization, and to utilize all the necessary and useful services it provides. This program has shaped her into a productive member of society and taught her there is hope for a better life.

Mike's Story

Mike is 29 years old and the eldest of three siblings. His family immigrated to Canada when he was seven years old. According to his mother, he was considered a good student and was generally well regarded by his peers and teachers. His behaviour changed abruptly after the untimely death of his father when Mike was 13 years old. He began to skip classes, using alcohol and marijuana, and dropped out of school. During this time, Mike had numerous admissions to hospital and was diagnosed with schizophrenia. After being asked to leave the family home because of his aggressive behaviour, Mike lived in shelters and on the street for the next few years until his arrest in 2007 on a charge of assault. He was found not criminally responsible and admitted to the law and mental health program at a provincial specialty psychiatric hospital. Mike spent three years at that hospital as an in-patient. Significant risk factors throughout his hospital admission included lack of insight and non-compliance with medication. In 2010, he moved into a high-support housing unit created as part of a collaboration between the psychiatric hospital and a local service provider. Mike shares a two-bedroom apartment with a co-resident. Staff report that Mike is social and helpful, and has created a sense of community with his co-residents. During his time in supportive housing, Mike has reconnected with family members, who visit him regularly at his apartment, and he is now employed three days a week in a café. He reports that his housing situation gives him a safe space where he enjoys living and that his mental and physical health have greatly improved during his time there. He has not been readmitted to hospital.

Figure 3: Number of Mental Health Supportive Housing Units Funded and Ministry Expenditure on Housing, 2006/07–2015/16

Source of data: Ministry of Health and Long-Term Care



In the year ending March 31, 2016, the Ministry, through the LHINs, spent $629 million on support services on all mental health clients, including those living in mental health supportive housing.

3.0 Audit Objective and Scope

Our audit objective was to assess whether the Ministry of Health and Long-Term Care (Ministry), in conjunction with the Local Health Integration Networks (LHINs) and service providers, had effective systems and procedures in place to cost-effectively oversee, co-ordinate and deliver housing with support services to people with mental illness, and measure and publicly report on the effectiveness of Ontario's mental health supportive housing. Senior management at the Ministry reviewed and agreed with our objective and associated criteria.

Our scope covered all four mental health supportive housing programs—rent supplement, dedicated housing, Homes for Special Care and Habitat Services Toronto—funded either fully (in the first three cases) or partly (in the last case) by the Ministry. Although they are referenced in this report, our audit scope did not include housing programs funded by other provincial ministries such as the Ministry of Housing, the Ministry of Children and Youth Services, and the Ministry of Community and Social Services—these housing programs are not intended to serve populations with mental health challenges.

We conducted our audit work at the Ministry, primarily at the Mental Health and Addictions Branch (prior to April 2016 the unit responsible for supportive housing had been part of the Provincial Programs Branch), which funds housing agencies and homeowners that operate the various housing programs, and the Financial Management Branch, which reconciles ministry funding with these

agencies' spending at year-end. LHINs contract with mental health support service providers that provide services to people with mental illness in their region, including those living in ministry-funded housing units. To that end, we visited three of the 14 LHINs—Toronto Central (corporate office in Toronto), Waterloo Wellington (corporate office in Kitchener) and North West (corporate office in Thunder Bay). Their combined expenditures in the fiscal year ending March 31, 2016, on mental health housing and all support services (delivered to all clients in the region, including those living in ministry-funded housing) were $183 million, or 29% of the overall provincial mental health housing and support services expenditures.

At seven supportive housing agencies across these three regions we conducted audit tests, interviewed senior and front-line staff and obtained their perspectives on ways to improve program delivery, visited both occupied and vacant mental health supportive housing units in different Ontario communities, housing individuals at different points in their path of recovery, and spoke to some tenants. At the planning phase of our audit, we also made preliminary visits to two other mental health supportive housing agencies in Toronto and toured a selection of units managed by each agency.

We researched how mental health supportive housing is operated in British Columbia, Alberta, Manitoba, the United States and the United Kingdom. We focused on the housing models used, types of outcomes tracked, service standards and levels of care applied, and how people access mental health supportive housing.

We discussed mental health supportive housing with stakeholder groups such as the Canadian Mental Health Association (Ontario Division and Toronto Chapter), Addictions and Mental Health Ontario, the Ontario Non-Profit Housing Association, and the Centre for Addiction and Mental Health. We also obtained information and perspectives from an Ontario clinician scientist who conducts research in community mental health, including mental health housing. As well, we reviewed studies and reports on mental health housing issued by the Mental Health Commission of Canada and the Select Committee on Mental Health and Addictions of the Ontario Legislature. We also contacted Ombudsman Ontario on complaints it received on mental health housing and considered these in the conduct of our audit.

4.0 Detailed Audit Observations

4.1 Demand for Mental Health Supportive Housing Not Fully Known and Wait Lists Not Well Managed

Ontario lacks a policy framework to guide the provision of mental health supportive housing. Such a policy framework could help the Ministry identify the type of information it needs to collect in order to appropriately plan for mental health supportive housing in Ontario. Because a policy framework is not in place, and there is no consolidated information on the various wait lists that are maintained across the province, the Ministry does not know the full extent of the demand for mental health supportive housing. It is known, however, that for those regions that do maintain centralized wait lists for mental health supportive housing, wait time is long, and can be up to seven years for those clients with the highest level of needs. Meanwhile, hospitalized patients who no longer require care have to wait in hospitals at a higher cost to taxpayers, as there is a critical shortage of supportive housing units in Ontario. People with the highest needs and those who are occupying expensive hospital beds do not always get priority over other candidates for mental health supportive housing, such as those who might be staying with a family member in the interim.

We look at the above issues in detail in the following subsections.

4.1.1 Lack of Housing Policy Framework That Defines Information Needs

Many parties are involved in delivering and overseeing mental health supportive housing in Ontario. While mental health service and housing agencies have shared responsibility for delivering mental health housing with support services in Ontario, the Ministry and the LHINs are accountable to Ontarians for providing sufficient housing and support services across the province, and ensuring that these agencies deliver high-quality mental health housing with support services to those in need.

In 2011, Ontario released the current iteration of its mental health and addictions strategy, *Open Minds, Healthy Minds*. While this strategy recognizes mental health supportive housing as a priority area, it stops short of being a policy framework on mental health supportive housing. A policy framework on mental health supportive housing would define the Ministry's and the LHINs' roles; set measurable goals and program priorities; define the types of data that the Ministry and the LHINs need to collect, measure and analyze; assess risks and options to manage the risks; determine the resources required; and measure the impact of the Ministry's contribution to mental health supportive housing.

The need for a policy framework on mental health housing was underscored in 1999, when the Ministry of Health issued *Making It Happen: Implementation Plan for Mental Health Reform*, noting that it needed to develop a policy on housing and improve access to housing.

Even though the Ministry still did not have such a policy at the time of our audit, in 2011 it had started working with three other ministries that also operate supportive housing programs to improve housing programs in Ontario. The other three ministries are the Ministry of Housing, the Ministry of Community and Social Services, and the Ministry of Children and Youth Services. Together, all four ministries operate 14 housing programs in Ontario, as shown in **Appendix 2**. In 2014, the inter-ministerial group consisting of representatives from these four ministries developed an internal policy framework to guide "long-term system transformation" in the current fragmented system of supportive housing in Ontario. According to this framework, in 10 years, Ontario's housing programs will have a better allocation of existing resources, the system will be better co-ordinated, clients will have housing stability and appropriate supports, client access will be streamlined, and there will be evidence-based data and performance measures to demonstrate value for money invested. This internal framework was approved by the deputy ministers from all four ministries in August 2015, and was intended to inform the development of a public framework, to be released by early 2017. The public framework is intended to guide better alignment of existing and/or planned housing initiatives, with the implementation period to span the following 10 years. As a result, changes at the ground level may not be completely realized until 28 years after the Ministry first identified the need for a housing policy.

RECOMMENDATION 1

To help identify data needed to plan for mental health supportive housing in Ontario such that people with mental illness can recover and live independently, the Ministry of Health and Long-Term Care (Ministry) should develop an implementation plan for its housing policy framework. This policy framework should define the Ministry's and the Local Health Integration Networks' (LHINs') roles; set measurable goals and program priorities; define the types of data that the Ministry and the LHINs need to collect, measure and analyze; assess risks and options to manage the risks; determine the resources required; and measure the impact of the Ministry's contribution to mental health supportive housing.

MINISTRY RESPONSE

The Ministry will work closely with the Ministry of Housing, the LHINs, the Mental Health

and Addictions Leadership Advisory Council and other partners to develop a plan for implementing the Supportive Housing Policy Framework for all Ministry-funded supportive housing. This includes housing for people living with mental health and addictions issues, as well as people living with physical disabilities, acquired brain injuries, and HIV/AIDS, and the frail elderly. The Ministry will work with its partners to ensure that its implementation plan includes the suggested elements in the Auditor General's recommendation.

4.1.2 Overall Demand Not Centrally Tracked

Having complete and current data on the overall demand for mental health supportive housing would allow the Ministry to properly plan for the supply of housing to meet clients' needs. But the Ministry has no consolidated province-wide data on people waiting to access mental health supportive housing, and does not collect local wait information from agencies or regional wait information. Some agencies have chosen to collect wait information in collaboration with other agencies in the same geographic area through a centralized or streamlined access process; some have chosen to track wait information on their own; and some have chosen to not maintain any wait information at all. As a result, the overall demand for mental health supportive housing is not readily known.

In a 2011 report on mental health housing, the Mental Health Commission of Canada estimated that, depending on assumptions made on prevalence of serious mental illness and people's ability to stay housed, Ontario had between 39,800 and 199,000 people who had serious mental illness and were inadequately housed. The same report recommended the development of 100,000 housing units to house people living with mental illness across Canada over the next decade. On the basis of Ontario's population, we estimated that about 38,000 of these units would be needed in Ontario alone, where there is a critical shortage of supportive housing. As noted in **Section 2.4**, as of March 31, 2016, there were over 12,300 supportive housing units in Ontario.

4.1.3 Use of Regional Wait Lists Not Common across 14 LHINs

Clients can access mental health supportive housing on their own by contacting either a supportive housing agency or a wait-list administrator (an organization that is either a mental health housing agency or an agency that provides wait-list administration services, funded by a Local Health Integration Network [LHIN]), or they can be referred to housing by their family or their health service providers. Typically, potential clients who are already connected to a mental health service provider are referred to supportive housing by their mental health case worker. Because there is a chronic under-supply of mental health supportive housing in Ontario, as evidenced by the existence of various wait lists, clients often do not get into housing right away. Instead, they are asked to wait until a unit becomes available. These clients could be homeless or waiting in hospitals or shelters. We discuss this further in **Section 4.1.5**.

The process to access housing varies because not all regions have a single, centralized regional wait list for mental health supportive housing. The Ministry does not require housing agencies located in the same LHIN region to draw up a centralized wait list to facilitate the placement of individuals living in the same region, similar to the process for placing clients in long-term-care homes. As of March 31, 2016, of the 14 LHINs across the province, five had implemented regional wait lists for mental health supportive housing. These five LHINs are Toronto Central, Waterloo Wellington, Central (the wait list does not cover the full LHIN region), Champlain, and Mississauga Halton. In these regions, clients can contact the single central wait-list administrator to get onto the list. Maintaining regional wait information allows for a consistent

access process for clients living in the same communities, which promotes equity across the region. A regional list also allows access to a larger stock of housing than a single agency list, which improves co-ordination among agencies to better serve clients with the most urgent needs.

Clients living in regions that do not have a central regional wait list have to contact individual housing agencies to get on their wait lists to access housing. Of the three regions we visited in this audit, Toronto Central and Waterloo Wellington maintained a regional wait list, and North West did not. As well, of the two housing agencies in the North West LHIN that did not maintain a regional wait list, only one agency maintained its own local wait list, while the other did not. The Ministry does not require LHINs or housing agencies to maintain local wait lists. The collection of demand data was raised in our 2008 audit on Community Mental Health and in our subsequent follow-up done in 2010, when the Ministry advised that it was in the process of addressing this issue.

RECOMMENDATION 2

To sufficiently understand the demand for mental health supportive housing for the purposes of short-term and long-term planning, the Ministry of Health and Long-Term Care should:

- work with Local Health Integration Networks (LHINs) that do not have a central wait list to establish one, adopting existing wait-list technology and best practices from LHINs that have wait-list systems; and
- collect overall information on wait lists and wait times by region on a regular basis to inform provincial planning decisions.

MINISTRY RESPONSE

The Ministry will work with LHINs and partner ministries (Ministry of Housing, Ministry of Community and Social Services, and Ministry of Children and Youth Services) to develop an approach to planning for and assessing demand that can best be used to improve access to appropriate housing and support services and inform short and long-term planning for supportive housing. This will include drawing on best practices and expertise from LHINs that already have wait-list systems.

The Ministry will also explore other methodologies, such as population-based models, and will work with Statistics Canada and partner ministries to understand the demand for supportive housing for persons living with mental health and addictions issues.

4.1.4 Clients Face Long Wait Times to Access Housing

Given that there is no centralized data on how long clients have to wait to access housing, we looked at wait-list and wait-time data maintained by the two LHIN regions we visited that maintained regional wait information. These two wait lists help manage placement of clients in mental health supportive housing in three of the province's 14 LHINs, or health regions, consisting of 28% of the province's population. Depending on the clients' level of need, wait time as of March 2016 ranged from 2.3 years to 4.5 years in one wait list, and from one year to seven years in the other wait list. As of March 31, 2016, there were slightly more than 11,000 people waiting on the first of these lists and about 570 on the other. In the largest centralized wait list in Ontario that co-ordinates access to housing for 21 mental health supportive housing agencies covering the entire Toronto Central LHIN and part of the Central LHIN, for every applicant who came off the list in the year ending March 31, 2016, almost six new applicants came onto the list. Ontarians have expressed their concern over these long wait times in complaints received by Ombudsman Ontario in the three years ending March 31, 2016.

4.1.5 Clients' Current Housing Situation Not Usually a Factor in Priority Access to Housing

According to a 2014 paper on housing conducted by the Centre for Addiction and Mental Health, while people wait for supportive housing, they often remain disconnected from the supports and services that they need, and may end up being readmitted to hospital or visiting emergency rooms, shelters, detoxification centres and jails, which are all higher-cost options. This benefits neither the individual living with mental health challenges nor society.

According to information collected by the administrator of the largest regional wait list in the province, which serves the entire Toronto Central LHIN and part of the Central LHIN, of the people waiting for mental health supportive housing as of March 31, 2016, 45% were listed as being in a shelter or having no fixed address, 25% were living in their privately owned or market-rent accommodation, 6% were in a hospital, 6% were residing in other forms of accommodation such as subsidized or non-profit housing or were in the care of a correctional or probational facility, and 18% had classified their situation as "other" or "unknown" and provided no further details. This wait-list administrator further confirmed that these people waiting for accommodation could be categorized as follows: 58% homeless; 24% at risk of becoming homeless (current economic and/or housing situation uncertain—may become homeless in the immediate or near future if there is no intervention); 18% not homeless. The other regional wait-list administrator we visited in the Waterloo Wellington LHIN did not have data in this format.

It is not known which of the 18% who classified their housing situation as "other" or "unknown" live with friends or family while still wanting to be placed in mental health supportive housing. The Ministry indicated that mental health supportive housing is intended for those who are homeless or at risk of becoming homeless. However, a concern is that some people are at more urgent need for supportive housing than others, yet none of the agencies or central wait-list administrators we examined in this audit would generally give them priority to access available housing. (Exceptions were specific initiatives aimed at reducing homelessness.) In other words, for the most part, available housing is given to the next available client in the order in which the clients' names were put on the list. So if there are two individuals on a wait list, one who is staying at a homeless shelter and the other with a parent, each will be housed in the order in which they applied to access housing—with the only priority being their suitability to the unit.

We researched how other jurisdictions place people with mental illness in their supportive housing, and found that the United Kingdom prioritizes those who are homeless and those who are the most vulnerable, such as the elderly, the mentally ill or people with physical disabilities, for placement in supportive housing.

A 2009 study conducted by health-care and supportive housing provider representatives from the Toronto Central LHIN noted that the insufficient supply of housing has resulted in "bed blocking" in hospitals and has caused system strains in the areas of financial costs and inappropriate level of care, and has affected the quality of life of those living with mental illness. To that end, in an October 2012 report entitled *Road to Recovery, Client Experiences in Supportive Housing*, the Centre for Addiction and Mental Health, one of the four specialty psychiatric hospitals in Ontario—hospitals that serve people living with complex mental illness—recommended that certain mental health patients waiting in hospitals who are on supportive housing wait lists be prioritized. These patients no longer need the care offered by a hospital but remain there due to a lack of suitable housing options. Discharging these patients to supportive housing would aid in their recovery and also free beds for people in need of care, thereby reallocating resources from the costlier hospital stays to the more economical option of community living.

As of March 31, 2016, 72 mental health patients, or about 46% of the 158 mental health patients

who no longer required the care offered by the province's four specialty psychiatric hospitals, were waiting in one of these hospitals to be placed in supervised or assisted living. We were unable to gather similar data on general hospitals, as data from these hospitals does not distinguish between patients with and without mental illness.

Prioritizing mental health patients waiting in hospitals to access mental health supportive housing is just one way to potentially achieve savings for the province; there may be other ways. At the time of our audit, mental health patients were not prioritized to access mental health supportive housing, except in limited circumstances in one of the three regions we visited. The daily cost of hospital care for a mental health in-patient at the province's four specialty psychiatric hospitals ranged from $787 to $1,138 in the year ending March 31, 2016. In comparison, according to a 2011 report issued by the Mental Health Commission of Canada, the estimated daily cost of providing supportive housing was about $82 to $115 for the highest-need clients; in 2016, after adjusting for inflation, this would be about $91 to $127 per day.

RECOMMENDATION 3

To reduce costs in the health-care system and other public services and better serve clients with mental health issues and housing needs, the Ministry of Health and Long-Term Care should evaluate whether certain clients, such as those waiting in hospitals or those who are homeless, should get priority to access housing, and provide direction to housing agencies on its decision.

MINISTRY RESPONSE

The Ministry will work with the LHINs and other partners to evaluate whether certain subpopulations should be granted priority access to supportive housing and what additional resources, if any, are required. Several recent ministry-funded supportive housing programs have targeted vulnerable and at-risk Ontarians, including those who have serious mental health and addictions issues and who are homeless or at risk of homelessness. The Ministry will provide direction to agencies delivering affected programs in the event of a policy change.

4.1.6 Clients with Higher Needs or Requiring Mobility Accommodation Wait Even Longer to Access Housing

Individuals who require higher levels of care are more challenging to house. These individuals may have developmental disabilities along with mental illness, or mental illness with symptoms so pervasive that they require close to 24/7 care, including meal preparation or medication management. Some agencies we visited informed us that there is not enough housing with high support services available in Ontario because most units are scattered in general rental buildings that are not well suited to 24/7 supervision, where staff may have to stay on site. This is confirmed by data we obtained from the wait-list administrator for the entire Toronto Central LHIN and part of the Central LHIN—in the years 2014/15 and 2015/16, the number one reason that agencies deferred a client's placement in supportive housing was that the client's needs were too high. In these two years, of the 325 clients bumped from the top of the list by the agencies, 109 (more than a third) were bumped because their needs were too high. To further put this into perspective, there were only 622 high-needs clients on the wait list, and yet they face the highest deferral rate—approximately one in six.

Of the two wait-list administrators we visited, only one maintains information on where people with high needs reside while waiting for suitable mental health supportive housing. According to this information, approximately 23% were in a hospital, 18% were in a shelter or had no fixed address, and 15% were living in their privately owned or market-rent accommodation. The rest were in other forms of residences, including subsidized housing, rooming or boarding homes, and retirement homes. Again,

about 12% classified their situation as "other" or "unknown" without providing further details.

Similarly, clients with mobility issues require housing adapted to accommodate their needs, such as an access ramp to the front of the building or an elevator to reach a higher floor. Because not all housing units, especially those in older agency-owned dedicated housing properties, are constructed with mobility accommodation, clients who need such accommodation typically have to wait longer to access mental health supportive housing. Some of the agencies we visited had to defer placement of clients because they could not accommodate the clients' accessibility needs. As well, some clients who are housed develop mobility issues as they age, and so they eventually also require special accommodation in their mental health supportive housing units. Two of the seven agencies we visited indicated that they had to transfer existing clients housed in mental health supportive housing who have developed mobility issues to more accessible units, and there is a growing internal demand to accommodate this need.

Given that the supply of housing stock does not meet the demands of the people with mental illness waiting to access supportive housing, the risk exists that clients are pulled (selected for ease of placement) rather than pushed from the wait list (housed according to their priority and needs) when a vacancy arises. Some agencies we visited told us that they had initiated discussions with the Ministry to make available more supportive housing units that meet higher needs and can accommodate people with mobility issues. Some of these discussions originated years ago, but at the time of our audit, the agencies still faced challenges in accommodating their most high-need clients. When suitable housing is not made available to accommodate the various needs of mental health clients, the housing system cannot be fully client-driven, and agencies may have an unintended bias in selecting clients who are easier to serve rather than those who are harder to serve.

RECOMMENDATION 4

To ensure that people with high needs or mobility issues are not subject to an unfair disadvantage of having to wait even longer than other clients for housing, the Ministry of Health and Long-Term Care should have sufficient housing stock to accommodate their needs.

MINISTRY RESPONSE

The Ministry recognizes that demand for all types of supportive housing outweighs the current supply of supportive housing. To meet rising demand, the Ministry has increased the number of supportive housing units that it funds by 46% over the last decade. Going forward, the Ministry will work with the Ministry of Housing and other ministries, LHINs, the community sector and other partners to create sufficient housing stock for all Ontarians in need of supportive housing, including people living with physical disabilities or in need of high levels of support services.

4.1.7 Process for Managing Wait Lists Needs Improvement

We examined the process used by two LHIN regions that administer regional wait lists to determine if the wait lists accurately reflect true demand information, which the Ministry needs to properly plan for the supply and allocation of mental health housing in Ontario. We found the following issues:

- Potential housing clients do not need to prove that they have a mental illness to be on a wait list. None of the wait lists—either regional or at individual agencies—require a potential client to provide medical proof that they have a mental illness diagnosis before putting their name on the list. For example, at one of the regions we visited, potential clients self-report their health condition to the wait-list administrator. It is only when a client's name comes to the top of the wait list that the housing agency with the vacancy would conduct an

intake assessment to assess the client's needs and determine the client's suitability for the vacant unit. At that point, the agency would still not require medical proof, but instead would determine if the client appears to have mental illness based on an in-person interview conducted by an agency staff member who has knowledge of mental illness. This staff person does not need to have a medical background. One housing agency informed us that it has used this approach to decline wait-list clients they assessed as not having a mental illness.

- Wait times are long, and clients on a wait list may have died or no longer require housing even though their names are still on the list. Neither of the two regional wait-list administrators we visited contacts clients regularly and proactively to update their information. Instead, they rely on clients to contact them to self-report changes in their status. The wait-list administrator that serves the entire Toronto Central LHIN and part of the Central LHIN advised us that its office is not funded to do wait-list management on an ongoing basis but received one-time funding from a LHIN a few years ago to hire temporary staff to update applications. Recently, it has received approval through a municipal program to invest in temporary resources to manage the wait list.

RECOMMENDATION 5

To ensure that only clients with demonstrated needs are provided access to mental health supportive housing and that wait lists provide an accurate picture of need in the province for planning purposes, the Ministry of Health and Long-Term Care should require the housing provider or wait-list administrator to confirm clients' mental illness diagnosis before putting their names on the wait list, and clients' suitability to remain on a wait list on an ongoing basis.

MINISTRY RESPONSE

The Ministry recognizes the importance of ensuring that only eligible applicants receive access to supportive housing. Many people living with mental health issues and in need of supportive housing are not in a position to easily obtain a diagnosis; therefore, the Ministry is concerned that requiring wait-list administrators and housing providers to confirm an individual's mental health-related diagnosis at the point of application could create a systemic barrier to accessing services for people who are already marginalized. Nevertheless, the Ministry will identify opportunities to assess eligibility and need to access services, either through diagnosis and/or a standardized assessment of need, in its work with partner ministries and stakeholders on a co-ordinated access system for supportive housing.

4.2 Continuum of Housing and Transitional Services Framework Not in Place in Ontario

One reason for the long wait time for mental health supportive housing in Ontario is that clients who are already housed can stay in these housing units indefinitely because the Ministry funds these homes as permanent housing. Even when clients no longer require support services, they can still stay in the mental health supportive housing. The Ministry has not provided any guidance to housing agencies to assist them in determining when a client can be more suitably housed in other settings.

We look at these issues in detail in the following subsections.

4.2.1 Mental Health Supportive Housing Is Permanent Housing

The Ministry-funded supportive housing program provides permanent housing to people with mental illness. In other words, there are no restrictions

on how long clients can remain in mental health supportive housing. A client can occupy a unit for an indefinite period at his or her wish. The Ministry does not maintain information on the duration of tenancy, but according to information we obtained from the seven housing agencies we visited, 22% of people had stayed beyond 10 years but less than 20 years as of March 2016, and 7% of people had stayed beyond 20 years.

Under a permanent housing approach, a vacancy comes about only through attrition—for instance, when a client decides to move out of supportive housing, dies, is imprisoned or evicted, or is hospitalized on a long-term basis. This approach by default creates a backlog in demand, as there is no certainty on when an occupied unit will become vacant for the next person on the wait list.

According to our research, British Columbia and Alberta follow a permanent housing model for mental health supportive housing.

Agencies, stakeholder associations and experts we spoke to during this audit all agreed that a permanent housing approach promotes stability of the client, and noted that the approach is best practice. Nevertheless, they all acknowledged that in order to create flow in the system there should also be a continuum of housing, which may include less-permanent housing where tenancy is set to a limited time frame, and step-up and step-down programs where clients can transition to either higher- or lower-support settings depending on their needs (we discuss this further in **Section 4.2.2**).

One agency we visited presented a proposal to the Ministry in May 2015 and at a joint meeting with the Ministry and the agency's LHIN in July 2015 on the benefits of a continuum of housing specifically for people whose needs have stabilized and may be transitioned to other forms of housing. According to the agency, with a continuum of housing, individuals can attain the highest level of independence; resources can be targeted at those who need them most; and services can better match needs. At the time of our audit, the Ministry was still considering this proposal.

Other jurisdictions, such as areas of New York, Los Angeles and Chicago, provide a mix of housing models, both permanent and time-limited, with flexible mental health and housing supports to help clients gain independence. For instance, a project in New York City has a 30-year history of successfully graduating people with mental illness from supportive housing to more independent living—fewer than 5% of program graduates returned to homelessness. To achieve this, the program offers vocational or employment supports that help residents to potentially find employment. As well, the program works with residents who have sufficient stability and income to live independently—it helps residents identify affordable housing and make the transition from supported life to independent living. The program credits its success to three factors: moving out is voluntary and not subject to a defined transition date; it is linked to affordable housing; and follow-up after-care services are offered.

4.2.2 Transitioning Clients to Other Forms of Housing Warrants Consideration

Some agencies identified clients in their housing who have stabilized and no longer require ongoing support, but none of the seven agencies we visited consistently transition such clients to other forms of housing. Remaining in a supportive housing unit but not receiving any support services contradicts the principle of supportive housing, which includes both housing and support services components. The agencies cited the following concerns that affect opportunities to transition clients out of mental health supportive housing:

- The lease the client signs as a tenant falls under the *Residential Tenancies Act* (Act). The Ministry intended this to afford clients living in mental health supportive housing full rights under the Act—it does not want a landlord to evict a client because of the client's mental health issues. But also, the Act protects clients from being required to move from mental health supportive housing to other alternative

housing (such as social housing) or into the private housing market.

- Moving can be a stressful event to mental health clients and may trigger their illness even though they have stabilized.
- Few housing alternatives exist for clients who are candidates for transition. Tenants may not have the means to rent from the private market without government assistance, and the wait lists for social housing operated by municipalities are long. The Ontario Non-Profit Housing Association estimated that in 2014 about 168,700 households were waiting for an affordable home, and those who were housed that year waited an average of almost four years.

Although the Ministry considers the province's mental health housing to be permanent and long term, it acknowledges that transitional housing deserves consideration. However, neither the Ministry nor the LHINs have given guidance to housing agencies to provide transitional services to clients or to dedicate part of the housing stock as transitional units. Some agencies have therefore acted on their own to facilitate transition of clients from mental health supportive housing to other forms of housing. For instance, four of the seven agencies we visited work with municipal social housing providers to seek housing arrangements for clients who can transition. However, these practices are not widespread. One of these agencies even requires clients it accepts into mental health supportive housing to also put their names on the municipal social housing wait list. As well, although it is not mandated and there is no formal program, all agencies work with the health sector to transition clients who require long-term care to long-term-care homes.

In our research, we found that British Columbia offers a spectrum of subsidized housing that provides different types of housing assistance for people in a variety of circumstances, enabling people to move from supported living to independent living, or vice versa, as their needs change or stabilize.

RECOMMENDATION 6

To ensure the limited supply of supportive housing is provided to mental health clients who can derive the most benefit from their residency, the Ministry of Health and Long-Term Care should:

- collect data to determine how many housing units that it funds are occupied by individuals who no longer receive or require mental health support services;
- working with housing agencies, determine the profile of clients who are suitable to be transitioned to other forms of housing and develop a transition plan for these clients;
- assess the merits of a housing continuum that offers a mix of time-limited and permanent housing;
- identify alternative settings that can be used to house individuals who no longer require support services; and
- develop strategies and processes to transition individuals who no longer require supportive housing to other forms of housing.

MINISTRY RESPONSE

The Ministry recognizes that supportive housing is permanent and that tenants have the right to security of tenure under the *Residential Tenancies Act, 2006*. The Ministry will work with LHINs and supportive housing providers to develop a profile of supportive housing tenants that would choose to move into other housing options in the community if they had the opportunity. As part of this work, the Ministry will work with housing providers and the LHINs to track units that are occupied by tenants who no longer derive benefit from the professional or peer supports offered by supportive housing.

The Ministry will consider the merits of a housing continuum and start to consider where mental health supportive housing appropriately fits.

The Ministry will work with partner ministries to identify opportunities to support the

successful transition of supportive housing tenants into other housing options in the community.

The current provincially-funded supportive housing system in Ontario administered by the Ministry and three other ministries includes time-limited transitional housing, as well as permanent housing. As part of the updated Long-Term Affordable Housing Strategy, Ontario has recognized that transitional housing providers need to be able to admit clients in need of support, while protecting client rights and helping them successfully transition to independent living. The Ministry of Housing is consulting with stakeholders on amending the *Residential Tenancies Act, 2006*, to facilitate the provision and operation of transitional housing. The Ministry will also consider investing in pilot projects that enable supportive housing tenants to move to other types of housing and will evaluate their success.

4.3 Supply of Housing Stock Not Evaluated for Adequacy, Distribution and Cost-effectiveness

The Ministry has not set any goals for how many units of supportive housing Ontario needs or will need in the future and by when, so it is not possible to determine whether the existing housing supply is being used effectively. In addition, Ontario's 12,365 units of mental health supportive housing across the province's 14 LHIN health regions are not planned with regard to areas with the most need because the Ministry did not and continues to not have complete information on housing demand, as noted in **Section 4.1**. Further, the Ministry has not determined which of the four housing programs is the most cost-effective in the long run to house clients with mental illness, even though our Office noted in our 2002 audit on Community Mental Health that the Ministry had not determined the number or type of housing spaces required to meet the needs of seriously mentally ill individuals or whether existing housing was meeting the needs of the individuals housed.

We look at these issues in detail in the following subsections.

4.3.1 Target Not Established for Quantity of Housing Needed in Ontario

Over the 10-year period between fiscal years 2006/07 and 2015/16, the Ministry has increased the number of supportive housing units it funds for those with mental health and housing needs by 46% (see **Figure 3**). But the current supply of housing stock still does not meet the demand for such housing.

Ontario provides fewer mental health housing units for every 10,000 people than three other provinces, according to a 2011 report issued by the Mental Health Commission of Canada that noted the number of dedicated housing units available to mental health clients in all provinces. As of March 2016, nine mental health housing units on average were available for every 10,000 people across Ontario (for dedicated housing and three other programs), compared to 12.8, 14.7 and 17 units (for dedicated housing only) in Manitoba, Quebec and British Columbia, respectively.

The Ministry does not establish a goal of how many mental health supportive housing units it needs or will need to fund, and by when, so it is not possible to measure whether its recent funding to increase the housing supply was adequate to address unmet needs. Addictions and Mental Health Ontario noted in a March 2014 proposal on mental health housing that the Ontario government should provide over 26,000 new units of supportive housing over seven years.

The need to assess housing needs and the areas with serious housing shortages was raised in our 2008 audit on Community Mental Health. In our subsequent follow-up on that audit in 2010, the Ministry advised us that it was in the process of addressing this issue.

4.3.2 Housing Stock Not Allocated According to Demand

Given that there is a chronic shortage of mental health supportive housing in Ontario, evidenced by the long wait lists and wait times, it is important that the Ministry allocates limited housing stock across the 14 LHIN health regions in the province so that all individuals waiting to be housed in mental health supportive housing have an equal opportunity to access housing in their own communities. The Ministry has more flexibility to reallocate housing stock belonging to the rent supplement program than the dedicated housing program—while the dedicated housing properties are in fixed locations, rent supplement units can be relocated to different areas by sourcing from different landlords.

The Ministry's 46% increase in the housing supply over the last 10 years has been accomplished primarily by way of funding additional rent supplement units. Ideally, the Ministry should allocate these housing units to regions proportional to the number of people waiting to be housed, but the Ministry does not have this information. Instead, it has allocated the units based on existing housing supply and indicators of mental health services demand, including unscheduled emergency department visits and repeat visits within 30 days for mental health and substance abuse conditions; admissions to adult designated mental health units; patient discharges and length of stay in adult designated mental health units; prevalence of mental health problems and addictions; and social demographics.

As we have seen, as of March 2016, nine mental health housing units on average were available for every 10,000 people across the province (a unit is a living quarter that could have one or more beds), but almost two-thirds of the province's 14 LHIN regions had fewer than nine units per every 10,000 people. The Toronto Central LHIN, covering the core of the City of Toronto, with its edges reaching out into Scarborough, North York and Etobicoke, had the highest concentration at 31 units per 10,000 people. Excluding the Toronto Central LHIN, the allocation of mental health housing units across the province's remaining 13 health regions differed significantly, with North East (covering areas including North Bay, Sault Ste. Marie, Sudbury and Timmins) having almost seven times as many units per 10,000 people as Mississauga Halton, as shown in **Figure 4**. A possible reason for this disparity in allocation of housing stock is that each LHIN region's demand for housing and mental health services varies, but the Ministry has not demonstrated that the existing housing stock across 14 LHINs is allocated equitably to address differing demands in each region, because it does not know the demand in each region. The disparity in the distribution of housing supply has contributed to differing wait times for mental health supportive housing across the province, as discussed in **Section 4.1.4**.

In addition, some of the units that the Ministry funds are self-contained units that accommodate one tenant, while others are shared units with multiple beds that accommodate several tenants, all with mental illness. However, the Ministry does not have data on how many of its funded units

Figure 4: Per Capita Distribution of Mental Health Housing Units by Local Health Integration Network, March 2016

Source of data: Ministry of Health and Long-Term Care

LHIN	Units per 10,000 People
Toronto Central	31.1
North East	14.6
North West	14.2
South West	10.6
North Simcoe Muskoka	10.0
South East	8.8
Central	7.1
Erie St. Clair	6.7
Champlain	6.7
Hamilton Niagara Haldimand Brant	6.3
Central West	5.6
Waterloo Wellington	5.1
Central East	4.2
Mississauga Halton	2.1
Province	**9.0**

are shared units and how many are self-contained units, nor on how many beds there are in the shared units. As a result, the Ministry may not always know how many beds exist in its housing stock, further hampering its ability to effectively allocate available housing stock across the province to equitably meet client needs. We discuss our concerns with managing vacancies in shared units later on in **Section 4.4.1**.

4.3.3 No Evaluation Conducted to Identify the Most Cost-effective Way to Provide Supportive Housing

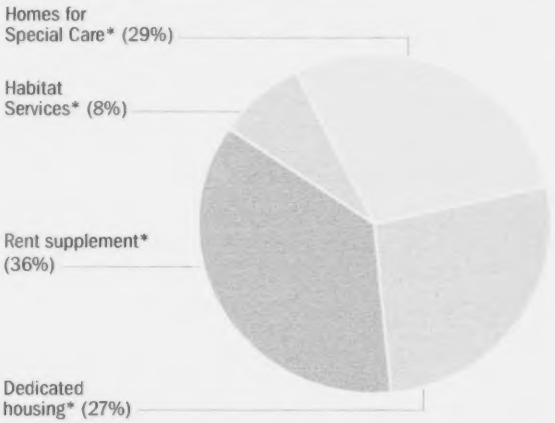
As shown in **Appendix 1**, about 80% of the mental health supportive housing units in Ontario belong to two housing programs—dedicated housing (properties are purchased with ministry funding and owned by housing agencies), and rent supplement (agencies rent in private landlord-owned properties.) The client pays rent to the agency using funds he or she collects from social assistance and/or a public pension for both housing programs, but the Ministry also pays a top-up rent amount to the agency for rent supplement housing.

The Ministry tracks housing cost by housing program. The LHINs, however, do not distinguish expenses for support services delivered to clients in housing versus clients not in housing. As a result, we could not compare spending on both housing and support services by housing program. Based on the Ministry's record of housing costs, in the year ending March 31, 2016, the Ministry spent 36% of its funding on rent supplement housing, followed by 29% on Homes for Special Care, 27% on dedicated housing, and 8% on Habitat Services, as shown in **Figure 5**. In the same year, as shown in **Figure 6**, housing cost by unit varied from $5,175 for rent supplement to $9,064 for dedicated housing. The per unit housing cost of $20,226 for Homes for Special Care is significantly higher than the per unit housing costs of other mental health supportive housing programs because ministry funding to the Homes for Special Care program includes food, medical costs, clothing and other support services, in addition to housing. The Ministry was unable to separate the housing cost from the other expenses for this housing program.

In the last 10 years ending in March 31, 2016, investments of $37.1 million in mental health supportive housing were all directed to rent supplement units. While rent supplement may be the least expensive option in the short term, the Ministry did not evaluate the merits of other housing programs in the long term. For example, dedicated housing builds permanent assets for the province's supportive housing program, which allows for greater flexibility to provide varying level of supports and to appropriately structure the living environment for tenants (issues we take up in **Sections 4.2.1**

Figure 5: Mental Health Supportive Housing Costs by Housing Program, 2015/16

Source of data: Ministry of Health and Long-Term Care



* See **Appendix 1** for definition of programs.

Figure 6: Annual Housing Cost per Unit by Housing Program, 2015/16

Source of data: Ministry of Health and Long-Term Care

Housing Program	Cost per Unit ($)
Homes for Special Care	20,226
Dedicated housing	9,064
Habitat Services	8,795*
Rent supplement	5,175

* This amount excludes approximately 20% of the total housing cost, which was contributed by the City of Toronto.

and **4.2.2**, and **Section 4.5**). We made a similar observation in our 2002 audit on Community Mental Health: we noted that the Ministry had not determined the number or type of housing spaces required to meet the needs of seriously mentally ill individuals or whether existing housing was meeting the needs of the individuals housed.

The Ministry has not addressed this issue. However, the government created the Mental Health and Addictions Leadership Advisory Council (Council)—a three-year advisory body consisting of 20 members representing diverse health sectors, including those with a lived experience of mental illness or addiction—in 2014. Among the Council's mandates was to look at options to expand the province's stock of supportive housing in 2016, including the use of social impact bonds, which allow the government to use private investments to finance interventions delivered by social service providers. If agreed-upon social outcomes and cost savings from these interventions are achieved, financial returns are paid to the private investors out of the savings realized by the government. At the completion of our audit, this work was still ongoing.

With respect to the remaining 20% of housing units, the Ministry has begun transforming the Homes for Special Care program and has allowed changes made to those delivered by Habitat Services through a pilot project, as these forms of housing were developed decades ago and do not necessarily follow current best practices of supportive housing. We noted almost 30 years ago in our *1987 Annual Report* that residential care homes (which primarily provide room and board) for the mentally ill were a poor way to address housing problems since they were not required to provide support services. The Ministry has since 2011 transformed 9% of the units under the Homes for Special Care program to the rent supplement program. The Ministry plans to make further changes to the Homes for Special Care program and expects to finalize this work by 2017. Similarly, the Ministry is also looking to change the Habitat Services program, following a pilot project in 2014 where funding originally provided to a house in the Habitat Services program that was sold was transferred to house the affected clients in self-contained units within private properties. In our view, the Ministry acted prudently in updating these two legacy housing programs, albeit decades late.

RECOMMENDATION 7

To ensure the limited resources available are allocated across the province to meet the housing needs of those with mental illness, the Ministry of Health and Long-Term Care should:

- collect data on the demand for mental health housing and establish a goal for the number of mental health supportive housing units the province should have, along with timelines;
- forecast the expected costs to house clients under each of the housing programs in the short and long term;
- determine and use the most cost-effective approach to house individuals with mental health and housing needs when making additional future investments in this area;
- work with Local Health Integration Networks to identify opportunities to redistribute resources among themselves to provide housing to areas with the greatest needs, considering the mix of self-contained and shared units in its housing stock;
- review input from the Mental Health and Addictions Leadership Advisory Council on ways to expand the province's stock of supportive housing, and determine actions required in an expeditious manner; and
- expedite plans to transform the Homes for Special Care and initiate a review to transform the Habitat Services program.

MINISTRY RESPONSE

The Ministry is working with its partner ministries (Ministry of Housing, Ministry of Community and Social Services, and Ministry of Children

and Youth Services) and other stakeholders to identify performance indicators for supportive housing and the data required. This work will improve the government's understanding of the impact of supportive housing programs and the impact they have on tenants. Once this work is completed, the Ministry will work with LHINs and other partners to collect data on demand for mental health supportive housing. The Ministry will subsequently establish targets and timelines.

As part of its planning, the Ministry will forecast the short and long-term costs of the programs it funds and will determine cost-effective approaches to delivery that consider local market conditions and capacity. This will include exploring opportunities for LHINs to re-allocate supportive housing resources amongst themselves and will use demand, local housing market, and other data to guide future investments.

The Ministry will continue to review the Mental Health and Addictions Leadership Advisory Council's advice to government and will use their advice to guide future supportive housing investment.

The Ministry will continue to modernize the Homes for Special Care program in a way that minimizes disruption to current tenants and will work with partners to develop a plan to modernize the Habitat Services program.

4.4 Limited Ministry Oversight of Housing Programs

Given that the province has limited housing stock, it is important that the Ministry ensure that vacancies are minimized to reap the full benefits of existing housing stock. However, the Ministry is not able to readily identify how many agencies exceed the allowable vacancy rate. Also, agencies are not required to report the reasons for their vacancies. This limits the opportunities for ministry monitoring and management of the housing stock. Additionally, even though agencies, stakeholders and experts recognize the continued use of older, shared housing units as a concern because people with mental illness prefer to live alone or with a loved one as opposed to living with other people with mental illness, the Ministry has not assessed how to better use these units. Lastly, the Ministry did not sufficiently monitor housing agencies to ensure they are being funded appropriately to operate the housing component of supportive housing.

We look at the above issues in detail in the following subsections.

4.4.1 Ministry Lacks Information to Monitor and Analyze Vacancies in Housing Units

Tracking and Reporting on Vacancies

When available mental health supportive housing units remain unoccupied, client wait times may be prolonged unnecessarily. As a result, stress and helplessness are also prolonged unnecessarily for these clients. Housing agencies typically need to prepare a unit for the next client after the previous tenant has moved out. If units have been damaged, agencies may have to spend additional time to repair the damages. With this in mind, the Ministry allows the housing agencies to budget for a 5% vacancy rate each year, meaning that each unit the agency operates can be vacant for up to 18 days a year on average.

While the Ministry requires agencies to report the duration of occupancy and vacancy in months, it has to manually calculate each agency's vacancy rate and compare it against the 5% standard. The Ministry also does not compare vacancy rates among agencies or across health regions. As a result, the Ministry does not know the number and percentage of agencies with vacancies over 5%, the range of vacancy rates between agencies and between regions, and the year-over-year comparison at the regional and provincial level. Without this data the Ministry is limited in its analysis of vacancies and cannot know whether there is improvement or decline in how vacancies are managed. This information would also assist the Ministry in its decisions on new funding for agencies.

Further, the Ministry does not generally require agencies to report the reasons for their vacancies and only does so in limited circumstances. Yet without knowing why a unit is left vacant for longer than expected, the Ministry cannot ensure that the limited available units are put in use on a timely basis to serve people with mental health and housing needs. One agency reported that only one tenant resided in a four-bedroom unit, with the remaining three beds in the unit being left vacant for 12 months. However, its reporting to the Ministry did not include the reasons, and only direct follow-up by the Ministry with the agency would have revealed that the vacancies were due to delays in finalizing a partnership agreement and challenges with transferring the existing tenants to other units. Having agencies proactively report the reasons for their vacancies would improve the efficiency of monitoring, ensure accountability for all vacancies, and create the potential to aggregate this data to allow the Ministry to effectively track the causes of vacancies and identify areas for further investigation.

Improving the collection of vacancy and occupancy data was raised in our 2008 audit on Community Mental Health. In following up on that audit in 2010, we were advised that the Ministry was in the process of addressing this issue.

Shared Housing Versus Self-Contained Housing

As already noted in **Section 4.3.2**, the Ministry does not have data on how many of its funded units are shared units, with multiple beds, and how many are self-contained units. According to the agencies we visited, most clients prefer to live in self-contained units. This was echoed by stakeholder associations and experts we spoke to during this audit. As well, a report that examined client experiences in mental health support housing issued by the Centre for Addiction and Mental Health in 2012 noted that many clients prefer to live alone or with a loved one as opposed to living with other people with mental illness. As a result, when a vacant unit turns up in these shared units, housing agencies have a harder time to fill it. One agency we visited had six shared housing units with long-term vacancies lasting up to 39 months.

The Ministry has not assessed how to effectively utilize shared housing, most of which is within dedicated housing properties that were purchased by housing agencies using government funds years ago and designed as such. To address this concern, agencies have recently proposed to the Ministry ways to better utilize these units, including renovating them into self-contained units or selling them off and replacing them with self-contained units. The Ministry has informed the agencies that it expects them to self-finance any changes to convert or replace these units to self-contained units.

RECOMMENDATION 8

To improve efficiency in monitoring and decision-making, and to ensure housing vacancies are minimized, the Ministry of Health and Long-Term Care should:

- require housing agencies to report vacancy rates and the reasons for vacancies; and
- compare vacancy information reported between agencies and between regions, and analyze this information from year to year.

MINISTRY RESPONSE

The Ministry will require supportive housing providers to report vacancy rates and the reasons for vacancies. The Ministry will then use this data to compare vacancy rates between agencies and between LHIN regions on an annual basis.

4.4.2 Lack of Assurance That Payments Made to Agencies to Provide Housing Are Appropriate

The Ministry regularly pays housing agencies one or more of the following amounts to operate the various types of mental health supportive housing:

- For agencies that operate agency-owned dedicated housing originally set up by the *province*:
  - an operating subsidy to cover mortgages, utilities, maintenance and, if applicable, property taxes (some housing agencies have registered charity status and have applied to their municipalities to be exempt from property tax);
  - a capital reserve to renovate and replace capital items such as roofs, fire alarm systems and brickwork; and
  - a rent subsidy to provide supportive housing so clients can pay affordable rent geared to their income.
- For agencies that operate agency-owned dedicated housing originally set up by the *federal government*: a mortgage subsidy to reduce the mortgage payments from the market rate to a reduced rate (in most cases) and also a rent subsidy for a limited number of properties under a special program.
- For agencies that administer the rent supplement units: a rent supplement subsidy to top up rent that clients pay the agencies, which ultimately pay the private landlords that own these units.

While the Ministry has increased the operating subsidy in each year between 2011/12 and 2015/16 beyond the inflation rate to help agencies cope with annual increases in utility costs, general maintenance and, if applicable, property taxes, we identified concerns with subsidies relating to rent and capital reserve payments:

- For subsidies relating to rent:
  - The Ministry subsidizes agencies using rent factors based on the lower end of market rent, an amount established by the Canada Mortgage and Housing Corporation, and does not adjust the subsidy according to the annual rent increases announced by the province's Landlord and Tenant Board (Board), formerly the Ontario Rental Housing Tribunal. Private landlords have the right to adjust their rent upward as allowed by the Board, so agencies administering the rent supplement program have to find efficiencies within their operations to finance the difference. Agencies also told us that finding private landlords who are willing to rent at the lower end of the market can be challenging.
  - The Ministry relies on the agencies to regularly verify their tenants' income and inform it if any changes should be made to the payment. However, the Ministry does not independently check whether agencies perform this verification. This process is not effective in detecting whether agencies indeed verified tenants' income—at six of the seven agencies we visited, we identified instances where income was not being verified once a year. As a result, the risk exists that the Ministry's subsidy payments to agencies may not be in all cases appropriately geared to tenants' ability to pay their rent, and tenants may be paying more or less rent than they should.
- For the capital reserve payment, the Ministry expects housing agencies to conduct building-condition audits on their own dedicated housing units, but does not formally require them to do so. Such audits are meant to identify the need for potential replacement and repair of capital items for up to 20 years and are typically completed by engineering firms. The Ministry does not specify how often these audits have to be completed and does not track which agencies have completed building-condition audits. Six of the seven agencies we visited own properties, but only three had completed a building-condition audit in accordance with the Ministry's expectation, one in 2014, one in 2013 and the third in 2002. The remaining three agencies either did not complete the recommended audit or instead completed an appraisal report, which provides fewer details and does not contain cost projections.

As well, although the Ministry has visited housing agencies, it does not formally inspect any properties. When agencies do not conduct building-condition reports and the Ministry does not inspect properties, the Ministry does not know if agencies are complying with the terms of their agreement—specifically, if agencies maintain units in a good state of repair and cleanliness fit for occupancy. In addition, the Ministry lacks accurate information needed to appropriately fund the agencies' capital reserves. As a result, agencies may have an unfunded liability balance, meaning that they lack the reserve funds to pay for needed major repairs and renovations on the buildings they own. This situation not only exposes the Ministry to possible eventual (but unknown) financial liabilities for the buildings, it could also pose safety risks to the clients living in these buildings. Based on the studies completed, two agencies expressed concerns with their capital reserves: one expects to be in an unfunded liability position of about $70,000 by 2027; the other expects that it will end up in an unfunded liability position given that its current capital reserve of $11 million is significantly less than the projected capital expenditures of $31.6 million, and the agency does not expect that the Ministry's contribution to the capital reserve in the near future will be sufficient to cover the difference.

RECOMMENDATION 9

To ensure that housing agencies receive appropriate resources to operate the mental health supportive housing program, the Ministry of Health and Long-Term Care should:

- assess if increases to rent supplement subsidies are in line with legally allowed rent increases;
- verify, on a sample basis, whether housing agencies have performed the required client income verifications, and adjust the client subsidy payment accordingly;
- specify to housing agencies the frequency of building-condition audits required; based on the results, work with the housing agencies to determine the appropriate action—for example, dispose of older assets in need of repair and replace these with updated safer units, or adjust payments to the capital reserves accordingly; and
- perform routine site inspection visits to mental health supportive housing properties to assess if agencies are complying with the terms of their agreements; specifically, if agencies maintain properties in a good state of repair and cleanliness fit for occupancy.

MINISTRY RESPONSE

The Ministry will assess its review process to determine if increases in rent supplement subsidies are in line with legally allowed rent increases.

The Ministry will also verify, on a sample basis, that housing agencies are routinely verifying the incomes of their tenants who receive rent assistance.

The Ministry will identify how frequently it will require housing providers to conduct building condition audits. Based on the results of the audits, the Ministry will work with housing providers to identify appropriate next steps.

The Ministry will develop an approach to conducting site visits of Ministry-funded properties to assess compliance with the terms of their agreements and Ministry directives.

4.4.3 Uncertain Status of Dedicated Housing Units with Expired and Soon-to-be-expired Operating Agreements

The Ministry funds the mortgages of all agency-owned dedicated housing properties. The Ministry assumed the funding of these mortgages in 1999 and 2000 from other government entities, such as the federal government and the provincial Ministry

of Housing. Each agency that operates dedicated housing has an operating agreement with the Ministry that is tied to the mortgage payment schedule and sets out the obligations of the agency. The mortgages of some of these properties have already been fully paid off. As of March 31, 2016, just over 6% of the dedicated mental health housing properties have operating agreements that have expired, and just over 8% have operating agreements that will expire in the next three years. By 2033, all mortgages will be paid off.

The operating agreements expire once the mortgages are fully paid. Without an operating agreement, agencies can continue to receive rent from tenants but will no longer receive any funding from the Ministry. The rental income may not be sufficient to cover ongoing operating and capital expenses associated with these units.

As well, even though these agencies can still use the properties purchased using government funding to house tenants with mental illness, the agencies are no longer required to report any information on the units, such as number of units used to house people with mental health issues, duration of occupancy and vacancy, and financial information. Without this information the Ministry cannot monitor these housing units, even though they were purchased with public funding. Under the agencies' letters patent (similar to articles of incorporation), however, agencies are still required to inform the Ministry should they discontinue the use of the housing units as mental health supportive housing, or sell the properties.

The Ministry of Housing has taken the lead to clarify with the federal government the future of the already-expired or soon-to-be-expired agreements for properties that were originally funded by the federal government and later transferred to the provincial government. The Ministry will follow the lead of the federal discussion and will determine options for the properties that were originally funded by provincial money.

RECOMMENDATION 10

To ensure appropriate oversight of agencies whose operating agreements have expired or will soon expire, and to confirm that the agencies still provide housing services to people with mental illness, the Ministry of Health and Long-Term Care should require agencies, regardless of the status of their operating agreements, to continue to report data on occupancy and vacancy, number of units used to house individuals with mental health issues, and financial information such as rent revenue and operating costs of units.

MINISTRY RESPONSE

The Ministry recognizes the importance of maintaining an interest in the dedicated supportive housing portfolio after housing providers' operating agreements have expired. This issue has also been identified by the Ministry of Housing for inclusion in the federal government's proposed National Housing Strategy. The Ministry is working with the Ministry of Housing and other ministry partners to ensure a consistent approach to ensure its supportive housing continues to be available after operating agreements end for all its clients, including those who have mental health and addictions issues.

4.5 More Information Needed to Confirm Delivery of Appropriate Support Services to Housed Tenants

So far in this report, we have discussed the housing component of mental health supportive housing. This section discusses the support services component. Providing support to keep clients housed, as well as crisis intervention, employment assistance, case management and support services to clients with mental illness can help these clients cope with their mental health challenges and live

independently in the community. Some housing agencies provide support services on their own; others partner with other mental health agencies in their geographic area to provide support services to clients living in the properties they manage. While the Ministry funds the housing component, the province's 14 Local Health Integration Networks (LHINs) fund agencies to provide support services to clients living in mental health supportive housing.

LHINs do not collect enough information to inform themselves whether housing clients receive any services at all, or about the types of services they get and the costs of delivering these services. As well, neither the Ministry nor the LHINs provide clients with any expectations of the types of support services and level of care they may be entitled to. They also do not require mental health agencies to use any standard assessment tool and to assess clients' ongoing needs at prescribed intervals while they are residing in mental health supportive housing. As a result, clients in different parts of the province receive different services and are reassessed at different frequencies. Finally, agencies that work with other agencies to provide a continuum of services to clients do not follow formal working protocols, contributing to the uncertainty of whether clients receive all the services that they require.

We look at the above issues in detail in the following subsections.

4.5.1 LHINs Do Not Know Which Support Services Are Delivered to Clients in Mental Health Supportive Housing and the Costs of These Services

Although LHINs fund mental health agencies to deliver support services in mental health supportive housing, the LHINs do not maintain sufficient information on the types, duration and costs of the different support services that are delivered to their clients.

In return for receiving LHIN funding, agencies regularly provide select service activity data to their LHIN. This includes such information as number of clients served, number of face-to-face visits made and number of group sessions delivered. However, the LHINs do not collect information on the types of support services provided to determine whether the services relate to, for instance, intensive case management, crisis intervention, employment assistance or counselling. LHINs also do not collect information on the number of hours of support services delivered. As a result, LHINs cannot determine which, if any, support services their clients receive with the funding they provide to mental health agencies.

As well, across all 14 LHINs, we noted that mental health agencies that provide support services did not always report service expenditures consistently. Some agencies provided cost information in one designated category called "support within housing," but others reported this information to LHINs in multiple cost categories, not distinguishing between clients residing in ministry-funded housing and other clients who use the same support services. As a result, neither the Ministry nor the LHINs could identify or estimate the expenditures on support services provided to clients living in mental health supportive housing. Without such information from the LHINs themselves or from agencies, LHINs cannot identify anomalies in spending on support services in mental health supportive housing.

4.5.2 Level of Care and Types of Support Services Needed for Clients Residing in Mental Health Supportive Housing Not Prescribed

Neither the Ministry nor the LHINs have a prescribed list of support services that agencies need to provide to clients living in mental health housing, but such lists have been compiled in the past. As early as 1988, a ministry-commissioned report by the Provincial Community Mental Health Committee identified a list of mental health support functions that are considered essential. Similar lists

were compiled in 1993 and 2001 in other ministry-commissioned studies. These services include, for example, case management, income support, family support, residential support and vocational support. As discussed in **Section 4.5.1**, there is no reporting or monitoring mechanism to allow the Ministry or the LHINs to confirm that services recommended by previously established expert groups are being delivered to clients living in mental health supportive housing. The Mental Health and Addictions Leadership Advisory Council noted in 2015 that it will create a working group to identify a basket of core mental health and addiction services that should be available to all Ontarians—even though similar lists have already been compiled for the Ministry.

Similarly, the Ministry and the LHINs have not defined the levels of care that should be provided to clients living in mental health supportive housing who are at various levels of needs, so there is little assurance that clients receive equitable service across the province. In comparison, the Ministry of Children and Youth Services in 2015 established a continuum-of-needs framework to help child and youth mental health agencies determine the level of needs and services according to the severity of mental health problems of individual children and youth across four distinct levels of need. As well, the Ministry commissioned the Centre for Addiction and Mental Health to conduct a study, published in 2001, to identify, among other things, a levels-of-care planning model as a guide to the services that should be made available to clients at different levels of care. According to this five-level model, a level one client would be capable of self-management and may use community services and supports intermittently; a level three client would need intensive assistance such as intensive case management, but can still live in the community; and a level five client would need to receive 24-hour in-patient care delivered by a multidisciplinary team of highly trained experts in a secure setting.

According to this 2001 study, regardless of their designated level of care, clients should always have access to a range of services, including in-patient care, crisis services, psychiatric services, client and family initiatives, primary medical care, housing support, income support, vocational and educational support, leisure and recreational activities, and family support. Even though these models are available and could be adapted to clients living in supportive housing, neither the Ministry nor the LHINs have adopted them.

4.5.3 Housing Clients Receive Different Support Services Depending on Where They Reside or None at All

Because neither the Ministry nor the LHINs prescribe to agencies the types and duration of support services supportive housing clients are expected to receive (as discussed in **Section 4.5.2**), the agencies deliver the services they feel are appropriate to their clients. The three LHINs that we visited support this approach, noting that agencies are in the best position to make these decisions. However, leaving service delivery entirely in the hands of the agencies can result in differences in what a client may receive, depending in some cases on where in the province the client lives. All seven agencies we visited offer housing support (services such as helping clients stay housed or manage relationships with landlords, and helping clients with meals) and case management (either through the agency or by partnering with another agency), but only some agencies offer in-house psychiatrists and in-house nurses to their housing clients. We also noted that six of the seven agencies we visited offer vocational or employment supports. Such supports include helping with resumés and interview skills, and assisting with finding jobs. Two of these agencies also hire tenants to do work such as office administration and property maintenance. But none of the agencies had partnerships with private businesses to connect tenants to potential job placements in those businesses.

In addition, neither the Ministry nor the LHINs require agencies to report whether their supportive

housing clients receive support services or not. Representatives from the agencies we visited informed us that some of their tenants do not receive any support services, either because their mental illness has stabilized and they no longer require these services, or because they have refused the services. Of the seven agencies we visited, two reported that a portion of their clients, ranging approximately from 6% to 8%, were not receiving any support services, in some cases because they were no longer required. This is contrary to the principle of supportive housing, which includes support services. Without information on the actual provision of services, the Ministry cannot assess the need for step-down programs or the options for alternative housing.

4.5.4 Clients Could Be Receiving Inappropriate Levels and Types of Care as Needs Are Not Regularly Reassessed

All seven agencies we visited assess their clients from time to time to determine what services they require. However, the assessments were not always conducted on a regular basis, so agencies risk delivering too much, too little or the wrong kind of support to clients living in mental health supportive housing.

All seven agencies have adopted a common assessment tool called the Ontario Common Assessment of Needs (OCAN), although only one of the three LHINs we visited mandated its agencies to use this tool. The tool measures a client's current situation in 24 different areas such as accommodation, self-care and daytime activities; the level of support the client currently receives from friends, family and service providers; and the client's support needs. The OCAN guidelines specify that a reassessment should be done every six months.

Six of the seven agencies we visited adopted these guidelines. The remaining agency reassessed its clients every 12 months instead. This agency explained that it was not cost-effective to reassess every six months and often there was little or no change in the client's needs. (The OCAN guidelines, however, do not say when frequency of reassessment can be reduced.) We reviewed a sample of client assessments at all seven agencies to determine whether they were conducted with the frequency prescribed by the agency's own policy. We found that in 28% of the cases reviewed, reassessment was not conducted with the required frequency as defined by the agency, with some assessments being 12 months overdue. As well, clients' service needs as identified in the OCAN tool could be summarized across the region or the province to determine service gaps, but the LHINs do not obtain aggregate assessment data. At the three LHINs we visited, only one had obtained aggregate data from the assessment tool, though this was only done in 2014 as a one-time exercise. Not having this information means that the LHINs could be providing too much funding to agencies that have clients with the least unmet needs, while short-changing agencies that have clients with the most unmet needs.

We raised the issues of improving the collection of data on unmet needs and assessing the adequacy and appropriateness of care provided to housing clients in our 2008 audit on Community Mental Health. In following up on our recommendations in 2010, the Ministry advised us that it was in the process of addressing these issues.

4.5.5 Partnering between Agencies to Provide Support Services Poses Challenges

Not all housing agencies we visited were able to provide on their own a full range of support services for their clients. To ensure clients' needs are not impacted because one agency cannot provide all the different types of services its clients may require, some agencies partner with others that can provide these services. This arrangement also allows the agency providing the supportive housing to accept clients with complex mental health issues whose level of needs can be met only by a different agency. However, working with other agencies poses the following challenges:

- Assessment information is not always shared with those who may need it—Even though the Ministry implemented the Integrated Assessment Record to help service providers share assessment information with each other, neither the Ministry nor the LHINs require service providers to upload client assessments to this system. The Integrated Assessment Record provides publicly funded health service organizations such as Community Care Access Centres and mental health agencies access to electronic client assessment information in a timely manner to support collaborative care planning. As a result, the benefit of the Integrated Assessment Record, meant to reduce the delay and frustration that clients may experience by having to provide similar information multiple times to various agencies that serve them, cannot be fully realized. We made the same observation in our *2015 Annual Report* in the audit of Community Care Access Centres—Home Care Program.
- Working relationships and protocols have not been formalized to reduce the risk that clients' service needs are not met—There have been disputes as to which agency should be providing a particular support; for instance, one agency reported having difficulty identifying whether it or a partner agency was responsible for helping clients prepare for bed bug extermination. As well, key information that could affect the housing provider is not always communicated by the partner agency that provides support services. For instance, one housing agency informed us that a partner agency had failed to communicate that a client had rejected case management and was without a case manager. Without a case manager, clients' mental health status may deteriorate and they may harm themselves or others and damage property, posing safety and financial risks.

In our 2008 audit on Community Mental Health, we noted that the LHINs need to assist agencies so they can better co-ordinate and collaborate with each other. In 2010, we followed up on our recommendations, and were advised that the LHINs were working with mental health agencies to develop approaches to ensure clients receive appropriate services.

RECOMMENDATION 11

To ensure tenants living in mental health supportive housing receive needed support services, Local Health Integration Networks, in conjunction with the Ministry of Health and Long-Term Care, should:

- set standards on what services and levels of care should be available across the province—for example, consider the model developed by the Centre for Addictions and Mental Health or the model adopted by the children and youth mental health sector—and monitor that these are offered in all regions of the province;
- collect cost and service data on the types of support services provided to clients living in mental health support housing and analyze the data to detect anomalies;
- obtain data on unmet service needs from housing agencies that use common assessment tools and reallocate resources to areas where needs are not being met;
- develop expectations on what assessment tool agencies should use to measure housing clients' needs and the frequency with which it should be used; and
- help mental health agencies establish formal working protocols to work with one another, and intervene when agencies fail to work collaboratively.

MINISTRY RESPONSE

The Mental Health and Addictions Leadership Advisory Council (Council) is working on a recommendation for government to establish a core set of services. The Ministry is awaiting Council recommendations, which may include

establishing the levels and standards of care with respect to supportive housing that should be available across the province.

The Ministry will work with stakeholders and the LHINs to identify appropriate assessment tools that agencies can use to measure tenants' needs and the desired frequency of administration. As part of this work, the LHINs will assess overall unmet needs using results from the assessment tool and, where appropriate, reallocate resources to address those unmet needs.

LHINS' RESPONSE

The LHINs are supportive of the Ministry's response and will work with the Ministry to implement Council recommendations.
LHINs will collect cost and service data on the types of support services provided to supportive housing clients and analyze the data to detect anomalies. LHINs will work with the Ministry to reallocate the required resources where appropriate.

LHINs will help mental health agencies establish formal working protocols to work with one another, and intervene when appropriate.

4.6 Oversight of Supportive Housing Agencies Is Limited

The mental health housing program serves a vulnerable group of the population. In order to ensure that agencies consistently deliver high-quality housing and support services to clients with mental illness, it is critical that the Ministry and the LHINs appropriately monitor these agencies and collect sufficient information about the program. We found that the sector still lacks outcome data decades after this was raised as an issue. As well, there is no provincial aggregation of client satisfaction surveys, complaints, serious incidents and best practices to identify practices worth sharing and areas needing intervention.

We look at the above issues in detail in the following subsections.

4.6.1 Data That Ministry and LHINs Collect Is Not Meaningful in Assessing Impact of Supportive Housing on Tenants

The Ministry and the LHINs regularly collect data, either directly or indirectly, from mental health agencies on the two areas of supportive housing:

- on the housing side—financial information such as agency operational and capital expenditures, number of units (but not clients in shared units), duration of occupancy and vacancy in months;
- on the support services side—number of face-to-face visits; number of interactions with service recipients; number of individuals served; number of group sessions delivered; number of staff (full-time equivalents); and wait time to receive support within housing programs.

Most of this information collected is output based. This type of information, however, does not help the Ministry or the LHINs evaluate whether the mental health supportive housing program is having a positive effect on clients; whether the support services delivered are effective; or whether the program helps reduce the strain on other government areas such as hospital visits and encounters with the justice system. In contrast, outcome-based information on housed clients, such as number of emergency room visits and hospital stays, living arrangements upon leaving mental health supportive housing, improvement in functionality, interactions with law enforcement, and ratio of met to unmet needs, can better help the Ministry assess the effectiveness of the mental health supportive housing program. We looked at how other jurisdictions measure the impact of their mental health housing programs, and found that Alberta measures the percentage of people that stay housed, and whether persons housed have reduced incarcerations, emergency room visits and in-patient hospitalizations.

In that regard, we noted that some agencies do collect hospital readmission data on their own initiative to determine if their housing programs

have made a positive impact, but the Ministry and the LHINs do not require agencies to report such information. All the agencies and LHINs we visited during this audit agreed that outcome data should be collected on housing clients. One of the three LHINs we visited specifically noted in a 2013 analysis it conducted on the demands placed on mental health and addiction services that more outcome indicators are required to improve the program.

Many external bodies, including the Select Committee on Mental Health and Addictions (Select Committee) appointed by the Ontario Legislature in February 2009, have made recommendations to the government over the years on ways to improve the mental health system in Ontario. Similarly, the Ministry itself has issued a number of policy frameworks and strategies to guide the delivery of mental health services in the province. See **Appendix 3** for a list of selected reports issued by either the Ministry or sector partners on mental health since 1988. Two of the 23 recommendations that the Select Committee made in August 2010 are most relevant to this report on mental health supportive housing. **Appendix 4** shows these two recommendations and the status of their implementation as at June 2016.

The lack of outcome data in the mental health sector has been identified in several of these provincial reports in the past. For instance, in 1999, the government issued "Making It Happen: Implementation Plan for Mental Health Reform," which called for the collection of outcome data. Similarly, in 2010, the Select Committee on Mental Health and Addictions asked the government to develop and maintain centralized and standardized mental health and addictions data to improve client outcomes. The Mental Health and Addictions Leadership Advisory Council noted in 2015 that it will establish a working group to identify challenges in creating a common data set and will work with stakeholders to develop solutions at the local and regional level. In other words, the issue of not having outcome data is still not resolved almost two decades after the government itself acknowledged this concern.

Because the Ministry lacks information on outcome data, it is not able to publicly report on the effectiveness of the mental health supportive housing programs. Doing so would help the Ministry demonstrate that its programs are effective and meet the objectives of helping people live independently and achieve recovery from mental illness.

We raised the collection of outcome data as an issue in our 2008 audit on Community Mental Health.

RECOMMENDATION 12

To assess whether the objective of the mental health supportive housing program is being met, the Ministry of Health and Long-Term Care, in conjunction with mental health service agencies and Local Health Integration Networks, should identify outcome indicators, establish performance targets, collect required information, and publicly report on the effectiveness of the province's mental health supportive housing.

MINISTRY RESPONSE

The Ministry recognizes the need to determine whether the objectives of mental health supportive housing program are being met. The Ministry is working with the Ministry of Housing and other stakeholders to identify common outcome-focused performance indicators for the supportive and affordable housing systems. Once the performance indicators have been finalized, the Ministry will work with LHINs and housing providers to establish targets, identify and collect supplementary outcome and performance data, and will publicly report on the results. Data and performance indicators developed will also align with the Ministry's Data and Quality Strategy for Mental Health and Addictions, which is in development.

4.6.2 Customer Satisfaction Surveys Not Standardized and Results Not Evaluated

Surveying clients on their experience in mental health housing can help agencies, LHINs and the Ministry assess whether clients feel they are improving or are having a positive experience. It may also help expose systemic issues that require corrective action. Of the seven agencies we visited, one was in the process of developing a survey at the time of our audit, while the remaining six have previously conducted client satisfaction surveys on their housing clients. These agencies survey their clients at different intervals, either on an occasional basis or annually, and each asks different questions. Only one of the three LHINs we visited requires mental health agencies to ask specific questions regarding client satisfaction and to report the results. Because the surveys do not all ask the same questions and offer consistent response options, aggregation of survey information is not possible. Asking common service satisfaction questions would allow client experience to be consistently measured across the province. The LHINs and the Ministry could also use the results to supplement their monitoring of the program and the service providers.

4.6.3 Complaints and Incidents Not Centrally Tracked

LHINs require in their service agreements with the mental health agencies that the agencies have in place policies and procedures to address complaints. Of the seven agencies we visited, all but one complied with this requirement. The LHINs do not verify if agencies have a formal complaint-handling policy or require agencies to report trends they note in complaints. Tracking complaints can help agencies and the LHINs identify common areas of concern across the system. Only two of the seven agencies formally track complaints. We reviewed the complaints received by the agencies that we visited, and noted that they relate to tenant substance use on premises, disturbances causing security and/or noise concerns, and tenant questions about rent rates. We reviewed the documentation on follow-up actions taken by the agencies and determined that the complaints were appropriately addressed.

While the Ministry requires operators of the Homes for Special Care housing program to report serious incidents, it does not extend this requirement to providers of other supportive housing programs. Of the seven agencies we visited, six report serious incidents informally to their funding LHIN, and the remaining agency only reports internally to its own senior management and board. Nevertheless, the LHINs have not defined what constitutes a serious incident. We reviewed a sample of serious incidents at the agencies we visited, and did not note any major systemic issues that require LHIN or ministry intervention. However, it would be prudent for the Ministry or the LHINs to request reports on serious incidents from all housing providers on a go-forward basis to identify areas that may require intervention.

RECOMMENDATION 13

To ensure that clients in mental health supportive housing receive quality service and to identify systemic concerns, the Ministry of Health and Long-Term Care, in conjunction with Local Health Integration Networks, should:

- require housing and mental health agencies to develop standard questions to measure client satisfaction and collect consolidated response information;
- define what constitutes a serious incident and require agencies to report these; and
- require all housing and mental health agencies to report trends they note in complaints.

MINISTRY RESPONSE

The Ministry will work with the LHINs to require supportive housing providers and support service providers to develop an approach to measure client satisfaction that can be consolidated to inform regional and provincial planning.

The Ministry will also work with the LHINs to develop a standardized definition of a serious incident and will consider developing an approach to collecting serious incident and complaint-related data.

4.6.4 Best Practices Not Always Shared Across LHINs and Service Agencies

In December 2002, the Provincial Forum of Mental Health Implementation Task Force Chairs recommended that the Ministry should apply best practices from other jurisdictions and encourage a wide choice of supported living environments for people living with mental illness. Similarly, eight years later in December 2010, the Minister's Advisory Group on the 10-Year Mental Health and Addictions Strategy recommended that the Ministry establish best practices/standards for housing and employment services and supports. However, at the time of our audit there was still no best practices guide for the mental health housing program. The Ministry was working with the Ministry of Housing to develop such a guide, and intends to finalize it in 2017. Regarding best practices standards for employment services and supports, the Ministry noted that since the Ministry of Community and Social Services was leading the development of a provincial employment strategy for people with disabilities, it would provide input to that ministry to ensure that people with mental illness are included in that strategy. In other words, years after these recommendations were made, the mental health supportive housing providers still do not have a set of best practices to refer to for housing and employment services.

At the LHINs and agencies we visited, we noted a number of best practices that could be shared with other LHINs or other agencies but were not widespread. For instance, one LHIN developed a scorecard to evaluate agency performance against targets, and shared the anonymous results as needed with its providers. As well, one agency provided training to local police about their clients and their program to help ensure police de-escalate encounters with their clients by taking them home instead of arresting or jailing them.

RECOMMENDATION 14

To ensure that best practices are effectively identified and shared, the Ministry of Health and Long-Term Care, in conjunction with Local Health Integration Networks, should develop a process to evaluate whether initiatives or projects implemented locally or in other jurisdictions yield good results, and communicate these practices across the province.

MINISTRY RESPONSE

As part of the update of the Province's Long-Term Affordable Housing Strategy Update, the Ministry is working with the Ministry of Housing and other ministry partners to develop a Best Practice Guide (the Guide) for the delivery of supportive housing. The Guide, which outlines evidence-based best practices in supportive housing, will be a resource for all individuals and organizations involved in the delivery of supportive housing and related service systems.

When the Guide is released, the Ministry will work with the LHINs and other stakeholders to communicate best practices to housing providers and community-based agencies. The Ministry will also work with the LHINs and housing providers to identify opportunities to evaluate current and future supportive housing initiatives.

LHINS' RESPONSE

LHINs are supportive of the Ministry's response and are developing a Provincial Leading Practices Framework.

4.6.5 Inspections Performed at Homes for Special Care

As of March 31, 2016, there were about 1,400 mental health supportive housing units in Homes for Special Care in Ontario. These homes are privately owned and provide meals, certain support services, 24/7 supervision and assistance with daily living to persons with serious mental illness. According to a regulation made under the *Homes for Special Care Act*, each home needs to be inspected at regular intervals. In practice, the Ministry delegates the inspection responsibility to hospital staff who work in nine psychiatric hospitals. These staff are expected to visit homes and inspect the following areas:

- physical environment and health and safety issues (for example, are bedrooms no less than 60 square feet, are all sanitary facilities working and in good repair, are laundry receptacles provided for soiled laundry, and are there adequate kitchen equipment, supplies and food storage areas?);
- general health (for example, are meals provided on a flexible time schedule, do tenants receive yearly physical examinations, and is medication stored in a locked cabinet?);
- tenant lifestyles (for example, is the home accessible to tenants on a 24-hour basis, and are tenants' rights regarding race, culture, religion and sexuality respected by the homeowner or home staff?); and
- life skills, social and recreation programs (for example, does the home provide adequate/appropriate in-home activities, does the homeowner or home staff assist the tenants in participating in community activities, and are the tenants aware of their financial status?).

We examined a sample of inspection reports conducted on Homes for Special Care and found that inspections were conducted on an annual basis as required.

Appendix 1: Characteristics of the Four Mental Health Housing Programs with Support Services Funded by the Ministry of Health and Long-Term Care

Source of data: Ministry of Health and Long-Term Care

Program Category	Description	Operated By	Ownership of Properties	# of Units as at March 31, 2016	Year(s) Established
Rent supplement	• Sourced by not-for-profit mental health supportive housing agencies from private landlords; usually in apartment buildings. • If the landlord leases with the agency, the agency pays full rent to landlord and collects rent from clients, whose funds come from either social assistance or private means such as pension. • If the landlord leases with the tenant, the agency, using Ministry funds, tops up the rent that the tenant directly pays to the landlord. ◦ Ministry tops up client's rent to lower end of market rent. • Includes Homes for Special Care that have been converted to rent supplement housing. • Support services provided by either housing agency or other mental health agencies.	115 Not-for-profit mental health supportive housing agencies	Private landlords, non-profit housing corporations, municipalities	7,048	1999–2000

Dedicated housing	• Purchased by not-for-profit mental health supportive housing agencies (housing agencies) using government funding.
	• Prior to the Ministry assuming funding, the dedicated housing portfolio was originally funded by either the federal government or the provincial Ministry of Housing;
	  ◦ For the provincial dedicated portfolio, the Ministry pays housing agencies one or more of: a) operating subsidies to cover utilities, mortgage payments, maintenance and property taxes; b) rent subsidies to provide supportive housing so clients can pay affordable rent geared to their income; and c) funds into a capital reserve to contribute toward capital repairs.
	  ◦ For the federal dedicated portfolio, the Ministry pays housing agencies only a mortgage subsidy (in most cases) and also a rent subsidy for a limited number of properties under the Ontario Community Housing Assistance Program.
	• Support services provided by either housing agency or other mental health agencies.
			Mental health housing agencies	2,959	• Early 1970s for the federal dedicated portfolio.
					• Early 1980s for the provincial dedicated portfolio.
					• The Ministry assumed funding of these portfolios in 1999 and 2000.

Program Category	Description	Operated By	Ownership of Properties	# of Units as at March 31, 2016	Year(s) Established
Homes for Special Care	• Operated by for-profit private homeowners licensed annually by the Ministry to provide 24/7 care to those with serious mental illness. • Ministry pays for housing, food, 24-hour supervision, other support services, medical costs and clothing. • LHINs fund nine hospitals that perform inspections.	117 For-profit homes	Private homeowners	1,427	1964
Habitat Services	• Private boarding and rooming houses owned by for-profit private homeowners. • Ministry and the City of Toronto jointly fund (80/20) Habitat Services, an agency that funds homeowners for the provision of room and board (e.g., room and meals), or in some cases, room only. • The Toronto Central LHIN funds the support services and the inspection/monitoring function provided by Habitat Services.	Habitat Services	Private homeowners	931	Early 1980s
			Total	**12,365**	

Appendix 2: List of All Supportive Housing Programs in Ontario

Source of data: Ministry of Health and Long-Term Care, Ministry of Community and Social Services, Ministry of Housing

	Supportive Housing Program	Responsible Ministry
1*	Rent supplement	Health and Long-Term Care
2*	Dedicated housing	Health and Long-Term Care
3*	Homes for Special Care	Health and Long-Term Care
4*	Habitat Services	Health and Long-Term Care
5	Assisted living services in supportive housing and for high-risk seniors	Health and Long-Term Care
6	Strong Communities Rent Supplement (supportive component)	Housing, but includes supports from Health and Long-Term Care and Community and Social Services
7	Affordable housing program (supportive component)	Housing, but includes supports from Health and Long-Term Care and Community and Social Services
8	Dedicated supportive housing	Community and Social Services
9	Residential supports for adults with a developmental disability	Community and Social Services
10	Transitional and housing support program	Community and Social Services
11	Dedicated supportive housing	Children and Youth Services
12	Community Homeless Prevention Initiative	Housing
13	Investment in Affordable Housing	Housing
14	Social housing	Housing

* Funded by the Ministry of Health and Long-Term Care and serve people with mental health-related needs–within the scope of this audit.

Note: Other supportive housing programs listed serve the following population groups: seniors/frail elderly, persons with physical disabilities, persons with developmental disabilities, persons with acquired brain injuries, persons with terminal or chronic illness (e.g., HIV/AIDS), persons who have a history of homelessness or are at risk of homelessness, youth at risk, victims of violence.

Appendix 3: Selected Reports on Mental Health in Ontario, 1988–2014

Prepared by the Office of the Auditor General of Ontario

Report Name	Issued By	Year
Building Community Support for People: A Plan for Mental Health In Ontario	Provincial Community Mental Health Committee	1988
Putting People First: The Reform of Mental Health Services in Ontario	Ministry of Health and Long-Term Care (MOHLTC)	1993
Making It Happen: Implementation Plan for Mental Health Reform	MOHLTC	1999
Making It Work: Policy Framework for Employment Supports for People with Serious Mental Illness	MOHLTC	2000
Making It Happen: Operational Framework for the Delivery of Mental Health Services and Supports	MOHLTC	2001
The Time Is Now: Themes and Recommendations for Mental Health Reform in Ontario (Final Report of the Provincial Forum of Mental Health Implementation Task Force Chairs)	Provincial Forum of Mental Health Implementation Task Force Chairs	2002
Making a Difference: Ontario's Community Mental Health Evaluation Initiative	Centre for Addiction and Mental Health, Ontario Mental Health Foundation, Canadian Mental Health Association, MOHLTC	2004
A Program Framework for: Mental Health Diversion/Court Support Services	MOHLTC	2006
Moving in the Right Direction	Centre for Addiction and Mental Health, Ontario Mental Health Foundation, Canadian Mental Health Association, Ontario Federation of Community Mental Health and Addiction Programs, MOHLTC	2009
Every Door Is the Right Door: Towards a 10-Year Mental Health and Addictions Strategy (A Discussion Paper)	MOHLTC	2009
Respect, Recovery, Resilience: Recommendations for Ontario's Mental Health and Addictions Strategy (From the Minister's Advisory Group on the 10-Year Mental Health and Addictions Strategy)	MOHLTC	2010
Select Committee on Mental Health and Addictions Final Report: Navigating the Journey to Wellness: The Comprehensive Mental Health and Addictions Action Plan for Ontarians*	Legislative Assembly of Ontario	2010
Open Minds, Healthy Minds: Ontario's Comprehensive Mental Health and Addictions Strategy	MOHLTC	2011
Open Minds, Healthy Minds: Ontario's Comprehensive Mental Health and Addictions Strategy (Update)	MOHLTC	2014

* See **Appendix 4** for recommendations relevant to mental health supportive housing.

Appendix 4: August 2010 Recommendations of the Select Committee on Mental Health and Addictions Most Relevant to Mental Health Housing with Support Services, and Status of Implementation as at June 2016

Prepared by the Office of the Auditor General of Ontario with input from the Ministry of Health and Long-Term Care

Recommendations	Status of Implementation
...	
3. Clients and their families should have access to system navigators who will connect them with the appropriate treatment and community support services (e.g., housing, income support, employment, peer support, and recreational opportunities). Those with continuing, complex needs should be supported by a plan that will lead them through their journey to recovery and wellness, particularly on discharge from institutional or residential treatment.	Limited implementation. The Mental Health and Addictions Leadership Advisory Council (Council) is working to identify improvements to the mental health and addictions system, including issues related to access and identifying structural barriers. For example, the Council's System Alignment and Capacity working group will work with sector stakeholders to identify structural barriers that prevent client-centred care at the local, regional and provincial levels and provide expert advice on how to best improve service co-ordination and integration. The Ministry of Health and Long-Term Care (Ministry) funds Connex and the Ministry of Children and Youth Services (MCYS) funds Kids' Help Phone. Both programs provide assistance to clients and families in locating appropriate mental health and/or addictions services. Connex was recently evaluated and one of the findings may be to improve access to services by leveraging these resources. The Ministry also funds the Centre for Addictions and Mental Health (CAMH) to develop "service collaboratives" in local communities to improve access and transitions to mental health and addiction supports for children, youth and families across services and sectors. The Ministry also works with MCYS, CAMH, and stakeholders to explore opportunities to scale up successful initiatives under the collaboratives across the province. Together with the Ministry, the MCYS child and youth mental health system transformation will develop clear pathways for children and youth moving through and across the service system between the community-based mental health sector and other natural access points such as schools, hospitals and primary care. The Ministry is working with MCYS on transitions between the child and youth mental health system and the adult system.
...	
13. Mental Health and Addictions Ontario should ensure, co-ordinate and advocate for the creation of additional affordable and safe housing units, with appropriate levels of support to meet the long-term and transitional needs of people with serious mental illnesses and addictions.	The government did not implement a new umbrella organization called Mental Health and Addictions Ontario to be responsible for designing, managing and co-ordinating the mental health and addictions system, and to ensure that programs and services are delivered consistently and comprehensively across Ontario. Responsibility for mental health and addictions services in Ontario currently rests with the Ministry, MCYS, the Local Health Integration Networks, and community mental health agencies. In the fiscal year 2010/11, the Ministry created 1,000 units of supportive housing for people with problematic substance use. Then in 2014/15, another 1,000 units of supportive housing was announced as part of the Mental Health and Addictions Strategy Phase II. The 1,000 units are being rolled out in three phases: 128 units in 2014/15, 624 units in 2015/16 and 248 units in 2016/17. Subsequent to our audit fieldwork, a private member's bill was introduced in the Legislature on September 21, 2016, that would allow the Mental Health and Addictions Leadership Advisory Council (Council) to continue to operate. If passed, Council would be required to submit a plan to the Minister within one year of the Act coming into force, which would include a timeline for establishing Mental Health and Addictions Ontario, and a recommended governance structure for it.

Ministry of Health and Long-Term Care

Large Community Hospital Operations

1.0 Summary

Ontario's network of 147 public hospitals includes 57 large community hospitals, along with small community hospitals, teaching hospitals, chronic-care and rehabilitation hospitals, and speciality psychiatric hospitals.

Large community hospitals are distinguished from the others by the high number of patients they treat. The Ministry of Health and Long-Term Care (Ministry) defines large community hospitals as those with 2,700 or more acute and day-surgery weighted cases in any two of the prior three years.

The 57 large community hospitals account for about 14,990 of Ontario's 31,000 hospital beds—or 48%.

This audit examines operations at three large community hospitals, each governed by a different regional authority (called a Local Health Integration Network, or LHIN).

Each of the three hospitals treats acute patients at two different sites and, together, the three hospitals accounted for $1.3 billion in Ministry funding, or 16% of the $7.89 billion total funding to large community hospitals in 2015/16.

Our audit was primarily based on data we collected at the hospitals we visited. However, to better understand all large community hospitals, we also did a survey of the 54 other hospitals in this category, and reviewed available aggregated data for all 57 large community hospitals.

In certain areas—those related to surgical-safety performance and infection rate, for example—we reviewed provincial data that covers all 147 public hospitals, because the data was not broken down by hospital type (such as large versus small community hospitals).

Typically, nine out of every 10 patients who go to a hospital leave the hospital after being diagnosed and treated in the emergency room. At the three large community hospitals we visited, we found that half of these patients are treated and are able to leave the hospital within three hours. However, we also found that the one in 10 patients whose conditions were serious enough to warrant admission to hospital for further treatment waited too long in the emergency room.

Our audit also found various key factors that are hindering patient care in hospitals. These include scheduling operating rooms and surgeon time in a way that makes it difficult for hospitals to respond to unexpected emergency surgical cases in a timely manner; letting surgeons book elective surgeries when they have on-call emergency duties; the lack of a centralized system to book patients on long wait lists for surgeries within the same region; rigid scheduling practices that limit the availability

of physicians, operating rooms and beds; funding uncertainties; and certain faulty quality-of-care practices that can lead to health problems and risks in hospitalized patients.

Among our findings:

- **Patients waiting too long in emergency rooms**: Many patients with conditions serious enough to require hospital admission wait excessive periods in emergency rooms—much longer than the Ministry-set target of no more than eight hours from triage (prioritizing patients according to the urgency of their conditions) to being transferred to intensive-care units or other acute-care wards. (The Ministry target is set for the 90th percentile. This means that 90% of patients should be transferred within eight hours, and no more than 10% should wait any longer.) In 2014/15, at the three hospitals we visited, only 52% of patients were transferred to intensive care in eight hours, not 90%; the 90th percentile wait time (after the 10% of patients with the longest wait times are removed) was 23 hours, not eight hours. The same year, only 30% of patients at the three hospitals we visited were transferred to other acute-care wards in eight hours, not 90%; the 90th percentile wait time was 37 hours, not eight hours.
- **Operating rooms not fully utilized**: Although most hospital sites we visited have nine to 12 operating rooms, only one at each site remained open evenings, weekends and statutory holidays for emergency surgery only. Our survey also found that most hospitals have planned operating-room closures over March break and for two to 10 weeks during the summer. This was despite the fact that many patients had been waiting a long time for elective surgery.
- **Long surgical wait times put patients at risk**: At the three hospitals we visited, one in four patients with critical or life-threatening conditions had to wait four hours on average for surgeries that should have started within two hours. We also noted that 47% of patients who should have undergone emergency surgery within two to eight hours had to wait on average more than 10 hours longer. For example, we noted that one patient who had suffered a traumatic brain injury waited 21.5 hours to receive a surgery. This patient had been assessed by a surgeon upon arrival at the emergency room and subsequently reassessed, by the same surgeon and another surgeon, to be clinically stable. However, two elective surgeries were prioritized to be completed before this case. During the waiting period, the patient's condition deteriorated rapidly and they went into a coma. The patient did not recover from the emergency surgery and died four days later.
- **Emergency surgical patients not always given priority**: Emergency surgeries have to compete with elective surgeries for operating-room time, resulting in long wait times for patients requiring emergency surgeries. All three hospitals we visited have policies that allow the most critical emergency surgeries to bump all others. However, other types of emergency surgeries typically have to wait until after hours, when that day's elective surgeries have been completed, or for a weekend slot. For example, a patient suffering from abdominal pain waited 25 hours before receiving surgery. The patient was diagnosed with acute appendicitis after a 7.5-hour investigation in the emergency room and waited another 17.5 hours from the time a decision was made that surgery was necessary to the time a surgery was performed. The patient's appendix ruptured during the waiting period, and had to stay in the hospital twice as long as expected due to a surgical complication.
- **Patients waiting too long for some urgent elective surgeries**: We reviewed wait times for elective surgeries at all 57 large community hospitals, and noted that they had not improved in the five years leading up

to 2015/16. We also noted that some large community hospitals are struggling to meet the Ministry's wait-time targets for the most urgent elective surgeries—for example, only 33%, not 90%, of urgent neurosurgeries were completed within the Ministry's 28-day target. In addition, patients in a certain part of the province waited almost a year for cataract surgery without being given the option of having it done earlier elsewhere, because there is no centralized referral and assessment system for each type of surgery in each region.

- **Year-end funding confirmation for cancer surgeries not timely**: The Ministry provides funding for cancer surgeries based on projections submitted by hospitals. At one hospital we visited, the hospital spent over $3.7 million on cancer surgeries, which was about $321,000 more than its mid-year projection. However, the Ministry did not confirm with this hospital that it would receive additional funding for the shortfall until six months after the March 31, 2016, year end due to the timing of the hospital data reporting and reconciliation process. This delay has created funding uncertainty and made it difficult for the hospital to plan and forecast in the current fiscal year and in the development of the future year's operating budget.

Another area of concern in our audit was patients developing new health problems as a result of their hospital stay. For example:

- **Patients discharged from Ontario hospitals had a relatively high incidence of sepsis**: Sepsis occurs when the body's fight against infection actually harms the patient, and can result in death. Canadian Institute for Health Information data for March 2015 shows Ontario hospital patients had the second-highest rate of sepsis in Canada (after the Yukon): 4.6 cases per 1,000 patients discharged, compared to an average of 4.1 for the rest of Canada. Bed occupancy rates of 85% or higher contribute to the likelihood of infection while in hospital. During 2015/16, 60% of all medicine wards in Ontario's large community hospitals has occupancy rates higher than 85%.
- **Alternate-level-of-care patients suffer from relatively high incidences of falls and overmedication**: At one of the hospitals we audited, senior alternate-level-of-care patients (that is, patients who no longer require hospital care but must remain there until a bed becomes available in another care setting) fell 2½ times more often than residents of long-term-care homes in the same LHIN area between January 2014 and March 2016. We also found that 37% of these patients were given anti-psychotic drugs in 2014/15, compared to 31% at the long-term-care homes in the area and 27% at long-term-care homes province-wide. (The other two hospitals did not track, on an aggregate level, falls and anti-psychotic drug therapy for their alternate-level-of-care patients.)
- **Ontario patients have relatively high incidences of health problems and risks that could be better managed with better quality-of-care practices**: We identified three health problems that Ontario hospitals do not manage or prevent as well as hospitals outside Ontario:
  - *Post-operative pulmonary embolism:* A pulmonary embolism is a blockage in the lung, often caused by a blood clot, that can damage the lung and other organs, and even lead to death. Leg or hip surgery is one of the risk factors for blood-clot blockage, as is having to stay in bed after surgery. There are ways to predict its likelihood and prevent clots after surgery, including medication and making the patient active as soon as possible after surgery. Ontario hospital patients aged 15 or over have a relatively high incidence of post-operative pulmonary embolism after hip- and knee-replacement surgeries: 679 cases per 100,000 patients

discharged, compared with 660 Canada-wide and 362 for the 34 other Organisation for Economic Co-operation and Development (OECD) countries.

- *Objects left inside surgical patients:* Objects such as sponges or pieces of other medical tools that are inadvertently left in a patient after surgery can cause internal bleeding, infections, other complications or death. Ontario surgical patients aged 15 or over experienced a higher rate of errors: 7.5 per 100,000 discharges, compared with 4 for the 34 other OECD countries (the Canada-wide rate is 8.6).
- *Vital life-saving medical equipment not adequately maintained:* Medical equipment such as ventilators, anesthesia units and defibrillators are used to keep patients alive. Like any complex machinery, they need to be regularly maintained or serviced to work properly; otherwise, they can fail, putting patients at risk. We found that at one hospital we visited, 20% of the equipment was not being maintained according to schedule; for some equipment, the last required maintenance was two years overdue. At another, only 53% of the equipment was being maintained according to schedule; 30% of the equipment received maintenance late, and 17% had received no maintenance.

Among our other findings:

- Hospital decision-making on patient care has been negatively impacted by the physician appointment and appeal process. We noted some instances where hospitals were not able to resolve human resources issues with physicians quickly because of the comprehensive legal process that the hospitals are required to follow under the *Public Hospital Act*. In some cases, longstanding disputes over physicians' hospital privileges have consumed considerable hospital administration and board time that could be better spent on patient care issues.
- As of March 2016, about 4,110 alternate-level-of-care patients were occupying hospital beds even though they no longer needed them. About half are waiting for long-term-care-home beds because there are not enough available in the community. We calculated that hospitals could have treated about 37,550 more patients if these alternate-level-of-care patients were not waiting in the hospital. Hospital beds are also more expensive than long-term-care beds. We estimated the additional cost to be $376 million in 2015/16.
- The three hospitals we audited do not have adequate access controls over private patient information. We found computer accounts still active for people no longer employed, computers without automatic logout function and unencrypted portable devices.
- None of the hospitals we visited had a centralized scheduling system to efficiently track and manage scheduling for all nursing units. As a result, nurses worked significant amounts of overtime, with a correspondingly significant number of sick days. We found that two of three hospitals do not conduct a thorough analysis to evaluate the costs and benefits of using agency nurses versus hiring additional full and/or part-time nursing staff. Although the third hospital has conducted a cost-benefit analysis on the use of agency nurses, the agency costs at this hospital had more than tripled in the last four years.

This report contains 17 recommendations, consisting of 33 actions, to address our audit findings.

OVERALL MINISTRY RESPONSE

The Ministry of Health and Long-Term Care (Ministry) appreciates the comprehensive audit conducted by the Auditor General and welcomes the recommendations contained in the report. These recommendations will support improvements to strengthen accountability and improve access to health care services.

The Ministry is committed to a strong and stable publicly funded hospital system that delivers quality patient services efficiently. Since 2007, hospitals have been funded through the Local Health Integration Networks (LHINs). The LHINs and agencies, in partnership with government, are helping to improve the patient's experience in our health care system by reducing service gaps, addressing performance issues, increasing efficiencies and ensuring greater health system accountability.

Hospital funding in Ontario has risen from $11.3 billion in 2003/04 to $17.4 billion in 2016/17, which represents a 54% increase. In the 2016 Ontario Budget, Ontario invested more than $345 million to all publicly funded hospitals to provide better patient access to high-quality health care services. In addition, the Province is investing up to $140 million to support hospitals in responding to growth in demand and reducing wait times for patient care. This funding will support priority services such as organ and tissue transplants; additional procedures such as cataract surgeries, and hip and knee replacements; and funding for small and specialty pediatric and psychiatric hospitals.

As part of Patients First: Action Plan for Health Care, the Ministry has reformed the way hospitals are funded, to provide equitable support for efficient, high-quality care and to help ensure that hospital funding is focused on the needs of the patient. By covering all the steps in the patient's journey, funding reform is improving the co-ordination of health care and making the patient's experience more seamless.

The Ministry will continue to support LHINs and hospitals to work together and balance budgets in a manner that sustains quality health services for the future.

OVERALL RESPONSE FROM HOSPITALS

Like all public hospitals in the Province of Ontario, we strive to deliver high quality care and the efficient use of public funds while continuously seeking opportunities to improve our ability to respond in a fiscally responsible way to the growing and changing needs of the patients we serve. We welcomed the opportunity to engage with the Office of the Auditor General and staff and to reflect on the challenges faced in our sector. Many of these challenges are larger than any one hospital but rather require the ongoing commitment of all stakeholders to the system—hospitals, government, LHINs, clinicians, physicians, to name a few. Recognition of this challenging environment, the need for a greater focus on system challenges like wait times, Alternative-Level-of-Care reform, stable and predictable funding, capacity planning and greater flexibility in physician hospital practices are all key in ongoing improvements.

We accept in principle the recommendations contained in the report, have made progress in many areas already and are moving to implement where more work needs to be done and as resources permit. The Office of the Auditor General recognized some best practices that can be utilized to assist in this work. These recommendations allow us an opportunity to continue to reflect on ways to improve the system.

Hospitals will continue to work in partnership with the Ministry of Health and Long-Term Care, the Ontario Hospital Association, Local Health Integration Networks, physicians, community agencies and service-provider organizations to support integration efforts for seamless care and the right care in the right place for patients.

2.0 Background

2.1 Overview of Ontario Hospitals

Of Ontario's 147 public hospitals, 57 are large community hospitals. The Ministry of Health and Long-Term Care (Ministry) defines large community hospitals as those that have had 2,700 or more acute and day-surgery cases in any two of the prior three years.

The rest are smaller community hospitals (defined as having fewer than 2,700 acute and day-surgery cases in any two of the prior three years), teaching hospitals, chronic-care or rehabilitation hospitals, and psychiatric hospitals. **Appendix 1** lists all public hospitals in Ontario, by types, Local Health Integration Networks (LHINs), and funding for the fiscal year ending March 31, 2016.

Ministry spending totalled about $51 billion in the fiscal year ending March 31, 2016. Of that, $17 billion (33%) went to Ontario's 147 public hospitals. Funding to large community hospitals accounted for about $7.89 billion of the $17 billion spent on hospitals. **Figure 1** shows the number of public hospitals by hospital type, descriptions and their funding trend over the past five years up to March 31, 2016.

2.2 Hospital Governance

The *Local Health System Integration Act, 2006* sets out the mandate of the province's 14 Local Health Integration Networks (LHINs), which administer health-care services in each region of the province.

Figure 1: The Number of Public Hospitals in Ontario, by Types and Descriptions, and Funding Trend for the Five Years Up to the End of March 31, 2016

Source of data: Ministry of Health and Long-Term Care

Hospital Type	Description	Number	Ministry Funding 2011/12 ($ million)	Ministry Funding 2015/16 ($ million)	5-Year Change in Ministry Funding to March 31, 2016 (%)
Large community	Hospitals that have had 2,700 or more acute and day-surgery cases in any two of the prior three years	57	7,620	7,893	3.6
Small community	Hospitals that have had fewer than 2,700 acute and day-surgery cases in any two of the prior three years	56	750	816	8.8
Teaching	Hospitals that provide acute and complex patient care. They are members of the Council of Academic Hospitals of Ontario and are connected to a medical or health sciences school, doing research and providing education and training for people who are, or are studying to be, health-care professionals (e.g., medical interns and residents, nurses, physiotherapists)	17	7,038	7,036	0.0
Chronic-care/ rehabilitation	Stand-alone hospitals that provide complex continuing care or rehabilitation services	13	743	626	(15.7)
Specialty psychiatric/mental health	Public hospitals that provide specialized assessment and treatment services for people with complex mental illnesses	4	571	602	5.4
Total		**147**	**16,722**	**16,973**	**1.5**

LHINs must enter into Service Accountability Agreements with each hospital in their area that outline performance and accountability expectations between LHINs and hospitals. The agreements also require hospitals to balance their budgets each year, meaning that a hospital's actual expenditures should not exceed its pre-approved budget.

The *Public Hospitals Act* (Act) governs the operations of public hospitals in Ontario. Hospitals are required to comply with provisions of the Act governing patient admission and discharge, communicable disease protocols, and reporting and safeguarding of health records. Regulations under the Act also set out governance requirements, including a stipulation that every hospital be governed and managed by a board of directors.

By law, Ontario hospitals are independent corporations accountable to their own boards, and directly responsible for their own day-to-day management. However, the Minister of Health and Long-Term Care may appoint inspectors, and the government may appoint hospital investigators and supervisors on the recommendation of the Minister. Ministry approvals are also required in relation to amalgamations and other integrations, use of premises for hospital purposes, and dispositions of hospital land or buildings.

2.3 Hospital Human Resources

Typically, a hospital's board of directors appoints a Chief Executive Officer and a Chief of Staff to manage day-to-day operations. Although the two work closely together, each has separate responsibilities, and each reports directly to the board.

The Chief Executive Officer typically oversees nursing, patient care, equipment and facility management, human resources, and other administrative matters, while the Chief of Staff, who is always a physician, primarily oversees the quality of medical diagnosis, care and treatment provided to all patients in the hospital. **Figure 2** illustrates the typical governance and reporting structure of a large community hospital in Ontario.

Professional Staff

Professional staff include surgeons, other physicians, dentists and midwives who work in hospitals. Although professional staff are appointed directly by the hospital's board, they are typically not salaried employees. Instead, the Ontario Health Insurance Plan (OHIP) compensates them for the services they perform in hospitals.

Most hospitals divide their professional staff into clinical departments, each of which has a Department Chief and a Medical Director. Professional staff report to the Chief of Staff through their Department Chiefs on professional practice matters—everything relating to the treatment and care of patients—and report to their Medical Directors on administrative, operational and budgetary matters.

Hospitals consider professional staff to be independent contractors, and award them hospital privileges that give them the right to use hospital facilities and equipment to treat patients without being hospital employees. Professional staff are appointed by a hospital's board for a maximum term of one year, and are required to apply annually for reappointment. The board is also responsible for hiring, disciplining and terminating professional staff.

Each hospital establishes its own bylaws, policies, rules and regulations setting out the rights and responsibilities of professional staff. As part of the reappointment process, hospital department chiefs and/or medical directors review and evaluate professional staff performance annually based on the hospital's bylaws, policies, rules and regulations.

Nurses

As **Figure 2** shows, the Chief Nursing Executive oversees and manages the professional practice of nursing staff and other health professionals such as dieticians, occupational/physical therapists and diagnostic medical technicians, who are generally employees of a hospital.

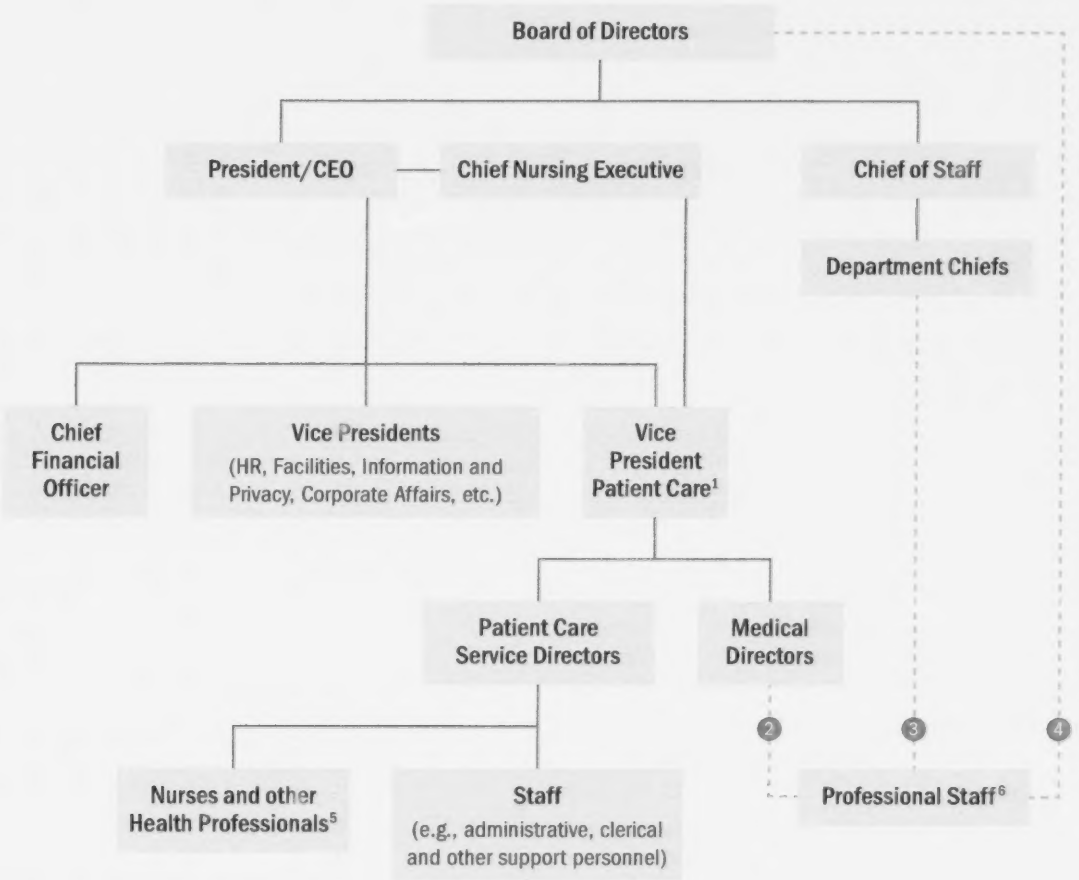
There are three categories of nurses in Ontario: Registered Practical Nurse (RPN), Registered Nurse

(RN) and Nurse Practitioner (NP). **Figure 3** shows the education of each type of nurse, along with their typical duties and the level of care each can provide.

All nurses are required to be graduates of a program recognized by the College of Nurses of Ontario (College), and to be registered with the College. Registered Practical Nurses have a two- or three-year diploma in nursing. Since 2005, entry to practice for new Registered Nurses has required a four-year baccalaureate in nursing. Both can perform the same types of duties, but Registered Nurses can provide a higher level of care and can look after patients with more acute or complex needs.

Figure 2: Typical Governance and Reporting Structure in a Large Community Hospital

Prepared by the Office of the Auditor General of Ontario



1. The Vice President of Patient Care Services is responsible for the planning, development and implementation of programs and initiatives to enhance patient experience.
2. Professional staff report administrative, operational and budgeting issues to their medical directors. Medical directors' responsibilities focus on strategic planning, budget management and human resource planning.
3. Professional staff report clinical issues to their department chiefs, who report to the chief of staff, who in turn reports to the Board of Directors. Department chiefs' responsibilities are focused on monitoring and supervision of the patient care provided by professional staff, including physicians.
4. The hospital board is responsible for hiring, disciplining and terminating professional staff.
5. Other health professionals are clinical staff such as dieticians, occupational/physical therapists and diagnostic medical technicians, who are generally employees of a hospital.
6. Professional staff, such as physicians, midwives and dentists, are typically not employees of the hospital. They are independent professionals working in the hospital and are given certain privileges, such as the right to use hospital facilities and equipment to treat patients. They are compensated by the Ontario Health Insurance Plan for the services they provide.

Figure 3: Types of Nurses in Ontario

Prepared by the Office of the Auditor General of Ontario

Type of Nurse	Education	Duties	Level of Care
Registered Practical Nurse (RPN)	Two- or three-year nursing diploma	Both RPNs and RNs can provide the same typical duties, as follows: • monitoring patients; • recording patient information and maintaining patient records; • assisting physicians with patient examinations and treatments	Generally care for patients who are less complex, more predictable and at low risk for negative outcomes; need to consult with RNs as patient complexity increases.
Registered Nurse (RN)	Since 2005, all new RN graduates are from a four-year bachelor's degree in nursing		Generally care for patients who are highly complex; unpredictable and at high risk for negative outcomes.
Nurse Practitioner (NP)	Master's or doctoral degree in nursing	NPs can perform duties outside the realm of an RN, such as diagnosing and treating acute illnesses, creating individualized treatment plans and prescribing medications. They may also specialize in a particular area of care or focus on health promotion and disease prevention.	NPs build and expand on RN competencies; NPs have, and demonstrate in practice, the competencies to use their legislated authority to diagnose, order and interpret diagnostic tests, prescribe pharmaceuticals and perform certain procedures such as catheterization and chest tube insertion.

Nurse Practitioners have master's or doctoral degrees in nursing and can provide the highest level of nursing care; some of their duties overlap with those of physicians, including the ability to assess and diagnose, order tests, prescribe medication, and determine patient treatment plans.

Almost all Ontario nurses are unionized, working under collective agreements negotiated between unions such as the Ontario Nurses Association or the Canadian Union of Public Employees and the Ontario Hospital Association.

The Ontario Hospital Association, founded in 1924, establishes best practices and facilitates information-sharing among hospitals, and represents hospitals in discussions and reviews of health-care policy with the Ontario government.

At times of nursing shortages arising from absences and/or higher-than-expected patient volumes, some hospitals get additional temporary nurses from external agencies. These nurses are not employees of the hospital, and are not covered by the collective agreements; the hospital pays the agencies for the hours worked by the agency nurses.

Other Hospital Employees

In addition to physicians and nurses, hospitals hire other professionals for both clinical and non-clinical jobs. Many clinical personnel (for example, pharmacists, lab technicians, dieticians and therapists) work alongside physicians and nurses, providing direct care to patients. Non-clinical employees work in administration, food services, housekeeping, security and equipment maintenance.

2.4 How Hospitals Are Funded

Before 2012, the amount of annual funding each hospital received from the Ministry was mainly based on historical spending and inflation. Under this system, each hospital was given a lump-sum payment.

In 2012, the Ministry began implementing its Health System Funding Reform, a model intended to allocate health-care dollars equitably, promote best clinical practices, and keep spending growth to

sustainable levels. The reform introduced two key funding components:

- The **health-based allocation** model estimates health-care expenses based on demographics and actual use of health services, taking into account the types and complexity of patient care that hospitals provide. Under this model, the Ministry is to adjust funding to hospitals based on patient demand and population growth.
- The **quality-based procedures** component funds hospitals for the types and number of patients they treat. The Ministry established specific procedures for hospitals to follow, based on best practices and efficiency measures, in treating their patients, and determined the amount each hospital would receive under this component. The Ministry's goal in setting quality-based procedures is to standardize care and minimize variations, and ensure that hospitals provide care according to best practices.

The Ministry provides about 80% of hospital funding, both directly and indirectly through the LHINs. Hospitals generate the remaining 20% themselves from other sources, including fundraising, semi-private and private accommodation charges, parking fees, food services, gift shops and retail outlets. While hospitals may fundraise directly, the most common fundraising model is the hospital foundation, which is an independent charitable corporation.

2.5 Key Hospital Services

In 2015/16, Ontario's 57 large community hospitals recorded 4.3 million visits to emergency rooms and performed 1.07 million surgical procedures. As of March 31, 2016, large community hospitals managed about 14,990 beds, or 48% of the 31,000 hospital beds in the province.

Figure 4 compares the volumes of selected services at the three hospitals we visited with those of all large community hospitals during fiscal 2015/16. The number of emergency visits, for example, at the three hospitals in that year represent 12% of the total number of emergency visits at all large community hospitals.

The two main hospital-service areas are categorized as "out-patient" and "in-patient" services. Out-patient services are typically delivered to patients who require only short hospital visits (to undergo a simple surgery, for example) and who return home the same day. In-patient services are delivered to patients requiring admission to hospital for a stay of at least one night for further treatment or monitoring.

"Patient flow" refers to the movement of patients through the different areas of the hospital, from the time they enter until they are discharged. **Figure 5** outlines key out-patient and in-patient services and patient flow.

Out-patient services are delivered in the following departments:

- **Emergency room**—Physicians assess the medical needs of patients and provide urgent

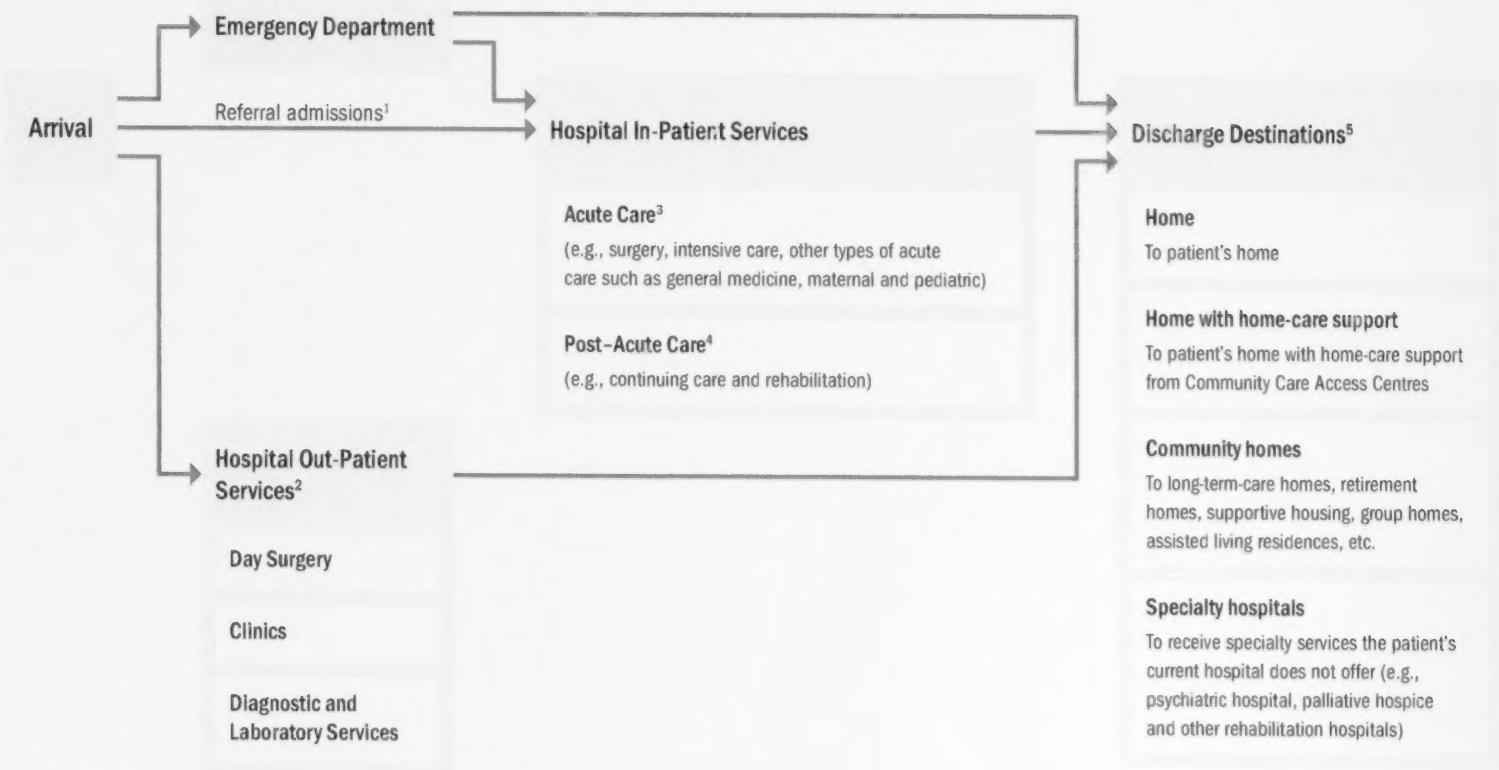
Figure 4: Comparison of Large Community Hospitals with the Three Hospitals We Visited on Selected Service Volumes, 2015/16

Source of data: Ministry of Health and Long-Term Care

Service Volumes	57 Large Community Hospitals	Three Hospitals Visited	Total Volume Managed by the Three Hospitals as % of Total Volume at All Large Community Hospitals
# of emergency-room visits	4,304,700	520,200	**12**
# of surgical procedures	1,070,800	139,900	**13**
# of in-patient admissions	684,900	104,500	**15**
# of in-patient discharges	685,900	105,400	**15**
# of Ministry-funded beds	14,990	1,800	**12**

Figure 5: Key Hospital Services and How Patients Move through Them

Prepared by the Office of the Auditor General of Ontario


Arrival
Emergency Department
Referral admissions[1]
Hospital In-Patient Services
Acute Care[3]
(e.g., surgery, intensive care, other types of acute care such as general medicine, maternal and pediatric)
Post-Acute Care[4]
(e.g., continuing care and rehabilitation)
Hospital Out-Patient Services[2]
Day Surgery
Clinics
Diagnostic and Laboratory Services
Discharge Destinations[5]
Home
To patient's home
Home with home-care support
To patient's home with home-care support from Community Care Access Centres
Community homes
To long-term-care homes, retirement homes, supportive housing, group homes, assisted living residences, etc.
Specialty hospitals
To receive specialty services the patient's current hospital does not offer (e.g., psychiatric hospital, palliative hospice and other rehabilitation hospitals)

→ **Patient Flow** refers to movement of patients through the different areas of the hospital from the time they enter until they are discharged.

1. Physician referrals from out-patient clinics, family doctors, specialists or other community physicians, and/or other hospitals.
2. Out-patient services are typically delivered to patients who only require short hospital visits and typically return home the same day. Some of these patients are referred by their out-patient clinic physician to be admitted to the hospital for further treatment.
3. Patients who receive out-patient services from day surgery and clinics may be admitted to acute care if their health condition deteriorates during the visit.
4. The majority of admitted in-patients are moved to an acute-care ward. Depending on their condition, some patients who require continued care after being treated in the acute-care ward will be transferred to the post-acute-care ward for further treatment.
5. Patients whose health conditions have improved enough to allow them to safely leave the hospital are discharged. If the destination for a patient's next phase of care is not ready to receive the patient when the patient is ready to be discharged, that patient must remain in hospital until the discharge destination becomes available. These patients are referred to as "alternate-level-of-care patients."

care to those with serious illness or injury. Some will need to be admitted as in-patients for further treatment. In 2015/16, of the overall 6.3 million emergency-room visits to Ontario hospitals (excluding visits to the Centre for Addiction and Mental Health), approximately 4% were made by patients diagnosed with mental-health-related illness. Between 2011/12 and 2015/16, emergency-room usage for mental health reasons increased by 21%, from 209,250 visits to 254,161 visits.

- **Day-surgery department**—Surgeons perform out-patient surgeries—shorter procedures with few complications that do not require overnight monitoring of patients afterwards. Patients can usually go home the day of the surgery.
- **Clinics**—Multidisciplinary teams assess, treat and/or provide education to patients about, for example, diabetes, breastfeeding and mental health through various day clinics.
- **Diagnostic and laboratory departments**—Diagnostic and laboratory departments provide different types of diagnostic imaging and medical tests.

In-patient services are delivered in both acute-care wards and post–acute-care wards. The length of hospital stay will depend on a patient's condition and rate of recovery.

- **Acute-care wards** include:
  - **Surgery wards**—Patients undergoing in-patient surgery stay in hospital overnight so they can be monitored. After their surgery, patients are transferred to the post-surgical ward to recover.
  - **Intensive-care units**—Critically ill patients who require very close observation and monitoring are placed in the intensive-care unit.
  - **Other acute-care wards**—These wards treat patients for severe episodes of illness for a short time, with the goal of discharging them as soon as they are stable. They are generally classified as general medicine, cancer, cardio-respiratory, maternal and pediatric.
- **Post–acute-care wards**—Patients who no longer require acute care, but who are still recovering from an illness or treatment, are placed in one of these wards for specialized follow-up care before they can be discharged.

2.6 How Patients Are Admitted to and Discharged from Hospital

Patients are admitted to hospital following a referral from a physician working either in or outside the hospital. For example, about 10% of emergency-room patients are admitted after being diagnosed and treated by an emergency-room physician. The majority of admitted patients are moved to an acute-care ward. Depending on their condition, some patients who require continued care after being treated in the acute-care ward will be transferred to the post-acute-care ward for further treatment.

Patients can also be admitted to hospital following a referral by a physician from the hospital's out-patient clinic or by their family doctor, specialists, physicians from walk-in or other community clinics, or from other hospitals. These are called "referral admissions," and are usually arranged ahead of time to allow hospital staff to prepare for the patient's arrival.

Patients whose conditions have improved enough to allow them to safely leave the hospital are discharged. As with admission, a physician decides when a patient can be discharged.

Some patients go home without needing continuing care. Others may be discharged with some level of supportive services from the local Community Care Access Centre, or to another destination such as a long-term-care home, supportive housing, a retirement home, a rehabilitation hospital or a hospice.

Even if patients are ready to be discharged they must remain in hospital until the destination for the next phase of care is ready to accept them. Such patients are referred to as "alternate-level-of-care" patients.

Patients with certain types of mental health issues are transferred to a specialty psychiatric hospital for further treatment if they require specialized psychiatric services or if their condition cannot be stabilized within two weeks of being admitted (for example, if their resistance to medication prevents them from reaching a stable condition).

2.7 Scheduling of Surgeries

In Ontario, 13% of all surgical cases are emergency surgeries, while the remaining 87% are elective surgeries.

Emergency surgery is required almost immediately in cases of trauma or critical or life-threatening conditions. People who need surgery but who are medically stable and can wait at least seven days for it without significant impact on their health are categorized as elective-surgery patients. Surgeons are responsible for prioritizing each patient based on the urgency of their condition.

Hospitals allocate operating-room time to each surgical department, such as cardiovascular or orthopedics, and, in turn, the head of each surgical department allocates operating-room time to each surgeon within the department. Typically, weekday daytime slots go to elective surgeries while weeknights and weekends are for emergency surgeries.

All three hospitals we visited have policies that allow the most urgent emergency surgeries to bump all others for the next available operating room. Other, less urgent emergency surgeries may be slotted into operating rooms after hours, when the day's elective surgeries have been completed, or on weekends.

Elective surgeries are usually scheduled ahead of time, based on how urgent they are, the surgeon's schedule, and what operating-room time slots are available.

2.8 Emergency-Room Length of Stay

Emergency-room length of stay measures the total time that a patient spends in the emergency room, from the time the patient is triaged (prioritized according to the urgency of the patient's condition) to the time the patient is either discharged or transferred to a bed elsewhere in the hospital such as ICU or other acute-care wards for further treatment. During a patient's emergency-room stay, emergency-room physicians and nurses may be diagnosing or treating the patient's condition, ordering tests and waiting for results in order to determine the best course of treatment.

Bed-wait time, usually a portion of the emergency-room length of stay, measures the time a patient spends in the emergency room, starting from a physician's decision to admit the patient to the hospital to the time the patient actually gets a bed elsewhere in the hospital.

This transfer can take place only after the hospital has determined which ward to send the patient to, based on the patient's illness or injury, the severity of his or her condition, the patient's age and sex, the availability of electronic monitoring units such as electrocardiogram or life-sign measuring units, and the type of infection-control measures required.

The hospital must then determine whether the right type of bed is available and ready, and may need to dispatch housekeeping staff to clean it. A delay in any step of the transfer process can mean longer bed-wait times for patients.

2.9 Personal Health Information

Hospitals keep highly confidential personal health information about patients that can be accessed at computer terminals and workstations throughout a hospital, some of them in high-traffic hallways.

Generally, hospital staff require one account to log into the computer terminal or workstation, and a second, separate account to access the system. Sometimes, other access-control measures are in place to ensure that patient privacy is safeguarded.

2.10 Maintenance of Medical Equipment

Hospitals rely on many types of equipment designed to aid in the diagnosis, monitoring or treatment of medical conditions. Some of this equipment is vital, and its failure can be a matter of life or death. Periodic inspection, calibration and maintenance is necessary to ensure that medical equipment is safe to use, and that it operates properly.

Technicians are generally responsible for maintaining medical equipment and performing regular preventive maintenance according to established specifications. Although a hospital may outsource this work or have it done in-house, it remains ultimately responsible for maintenance of its equipment.

3.0 Audit Objective and Scope

The objective of our audit was to access whether large community hospitals, in working with the Ministry of Health and Long-Term Care (Ministry), have effective systems and procedures in place to ensure that:

- patients receive timely, high-quality, safe, reliable and equitable health-care services;
- resources are used efficiently; and
- operational effectiveness is measured, assessed and reported on.

This audit focuses primarily on the three large community hospitals we visited. These three hospitals, which represent different regions and are governed by different Local Health Integration Networks (LHINs), are a geographically diverse sample of the 57 large community hospitals in the province. The three hospitals accounted for $1.3 billion in Ministry funding, or 16% of the $7.89 billion total funding given to large community hospitals in 2015/16.

We conducted our audit at the three hospitals, which each operate two sites to serve their areas. See **Figure 6** for the hospitals we visited, the LHINs they belong to, and their total number of beds, professional staff and nurses as well as the annual funding they received from the Ministry for the 2015/16 fiscal year.

To obtain a better understanding of the 57 large community hospitals, we extended our review to cover the remaining 54 large community hospitals in the province by:

- conducting a survey of the 54 that we did not visit during this audit (we received a response rate of 61%); and
- reviewing data where aggregated information was available for all large community hospitals in the province.

Figure 6: Number of Hospital Beds, Professional Staff and Nurses, and Annual Ministry Funding at the Three Large Community Hospitals We Visited, 2015/16

Source of data: Ministry of Health and Long-Term Care, Rouge Valley Health System, Trillium Health Partners and Windsor Regional Hospital

Hospital	Local Health Integrated Network	Number of Hospital Beds Funded by the Ministry	Number of Professional Staff[1]	Number of Nurses[2]	Annual Funding Received from the Ministry ($ million)
Trillium Health Partners	Mississauga Halton	945	855	3,245	714
Windsor Regional Hospital	Erie St. Clair	525	495	1,365	320
Rouge Valley Health System[3]	Central East	340	325	1,010	269

1. Includes physicians, Nurse Practitioners, midwives and dentists.
2. Full-time employee equivalent for Registered Nurses and Registered Practical Nurses.
3. On April 28, 2016, the Ministry of Health and Long-Term Care announced its decision to split the operations of the two Rouge Valley sites. The split will be effective December 1, 2016. At that time, the Centenary site will be amalgamated with the Scarborough Hospital under a new governance structure. The Ajax/Pickering site will be integrated into Lakeridge Health. All three hospitals are in the Central East LHIN.

We also asked a selected number of physicians, chosen on a random basis, to complete our survey on their opinion regarding, among other things, the scheduling and use of operating rooms. About 35% of them responded to our survey.

In certain areas—those relating to surgical-safety performance and infection rate, for example—we used provincial data covering all 147 public hospitals in Ontario, because such data is not kept separately for large community hospitals.

Our audit covered wait times at emergency rooms; wait times for hospital beds; wait times for surgeries; physicians' hospital privileges; management of nursing and housekeeping staff; movement of patients through hospitals; maintenance of medical equipment; and protection of personal health information.

We also reviewed the Ministry's funding process for large community hospitals and the related information reported from hospitals to LHINs and the Ministry.

We conducted our audit work between November 2015 and June 2016. Most of our file reviews went back three years, although we did some trend analyses going back five years. This audit did not examine hospital clinics, or diagnostic and laboratory services delivered by hospitals.

In conducting our audit, we reviewed and analyzed relevant Ministry and hospital data and files, administrative policies and procedures, and conducted interviews with hospital and ministry staff.

We also reviewed relevant research, including best practices for hospital operations in Ontario and other jurisdictions. In addition, we met with representatives from the U.S. firm Kaiser Permanente to examine some of the best practices they have adopted to deliver patient care. See **Appendix 2** for a list of best practices, including those used by Kaiser Permanente. As well, we engaged as an adviser an independent consultant with expert knowledge in hospital operations.

In addition, we met with representatives from various stakeholder groups, including the Ontario Hospital Association, the College of Physicians and Surgeons of Ontario, the College of Nurses of Ontario, the Ontario Nurses' Association, and the Registered Practical Nurses Association of Ontario. We also met with the Ontario Long-Term Care Association, the Ontario Association of Non-Profit Homes & Services for Seniors, and the Advocacy Centre for the Elderly, to obtain their views on senior care. We met with the Information and Privacy Commissioner of Ontario to discuss areas related to protection of patient records. We also met with the board of directors of two of the three large community hospitals we visited and board representatives of the third hospital.

Finally, we reviewed and followed up on the relevant audit issues raised by our Office in previous reports, including Hospitals—Administration of Medical Equipment (2006); Hospitals—Management and Use of Surgical Facilities (2007); Hospital Emergency Departments (2010); Discharge of Hospital Patients (2010); and Long-Term-Care Home Placement Process (2012). **Appendix 3** summarizes the relevant recommendations that had not been fully addressed since the completion of our earlier audits.

4.0 Detailed Audit Observations

4.1 Year-End Funding Confirmation for Cancer Surgeries Not Timely

The Ministry of Health and Long-Term Care (Ministry) has, through its timing of funding decisions, specifically on cancer surgeries, made it difficult for hospitals to properly plan their operating budgets throughout the year.

The Ministry provides funding for cancer surgeries based on projections submitted by hospitals. At one of the hospitals we visited, the hospital spent over $3.7 million on 492 cancer surgeries, which was about $321,000 more than its mid-year

projection, which was based on 38 fewer cancer surgeries. However, the Ministry did not confirm with this hospital that it would receive additional funding for the shortfall until six months after the March 31, 2016, year-end due to the timing of the current hospital data reporting and reconciliation process. This delay has created funding uncertainty and made it difficult for the hospital to plan and forecast in the current fiscal year and in the development of the future year's operating budget.

We also noted that 58% of the large community hospitals that responded to our survey said that they had to defer some types of surgeries, including cataract and hip/knee replacements, to the following year, because Ministry funding had not met the demand.

Some physicians who responded to our survey on the scheduling and use of operating rooms pointed out the same problem. They commented that the number of surgeries performed at a hospital is capped to a particular "quota" and that the hospital would not receive extra funding once the caps are reached, in spite of patient needs.

RECOMMENDATION 1

To ensure that funding to hospitals accurately reflects patient needs, the Ministry of Health and Long-Term Care should plan appropriately so that surgeries are delivered when needed.

MINISTRY RESPONSE

The Ministry is committed to ensuring that patients are provided with faster access to the right care.

To ensure patient access, the Ministry works with LHINs to determine local need and projected volume of required procedures. In addition, the Ministry has issued volume management instructions to the LHINs, asking LHINs to work with their hospitals to ensure that patients have access to surgery throughout the year.

The Ministry works with LHINs and hospitals throughout the year to rebalance and supplement funding for procedures, such as cardiac procedures, based on patient needs.

The Ministry will continue to work with LHINs and hospitals on aligning capacity and funding for surgeries with patient needs.

4.2 Patients Waiting Too Long in Emergency Rooms

Typically, about nine out of every 10 patients leave hospital after being diagnosed and treated in the emergency room. Based on data provided by the three hospitals we visited, we found that half of these patients generally receive service and are able to leave the hospital within three hours. In addition, the 90th percentile wait time (after the 10% of patients with the longest wait times are removed) was six-and-a-half hours, which is within the Ministry's target of eight hours.

However, we found that the one in ten patients whose conditions were serious enough to warrant admission to hospital for further treatment waited too long in the emergency room. These patients waited much longer to be transferred to a ward than the Ministry-set target of eight hours from the time they first arrive in the emergency department. The Ministry target for these patients is also set for the 90th percentile. This means that 90% of these patients should be transferred within eight hours, and no more than 10% should wait any longer. Based on 2014/15 data provided by the three hospitals we visited, we found the following:

- Only 52% of patients were transferred to intensive-care units (ICUs) in eight hours, and the 90th percentile wait time was 23 hours, not eight.
- Only 30% of patients were transferred to other acute-care wards in eight hours, and the 90th percentile wait time was 37 hours, not eight.

Figure 7 summarizes the patient wait times in emergency rooms at the three hospitals we visited.

Figure 7: Combined Emergency-Room Wait Time (Including Bed-Wait Time) at the Three Hospitals We Visited, Median and 90th Percentile, 2014/15

Source of data: Ministry of Health and Long-Term Care, Rouge Valley Health System, Trillium Health Partners and Windsor Regional Hospital

	Length of Stay (# of Hours)	
	Median[1]	**90th Percentile[2]**
Patients who were admitted to an intensive-care unit (ICU)		
Total wait time in emergency room[3]	8	23
Bed-wait time[4]	2	17
Patients who were admitted to acute-care wards other than an ICU		
Total wait time in emergency room[3]	13	37
Bed-wait time[4]	5	28

1. The median indicates the mid-point at which half of the patients waited less and half waited more.
2. The 90th percentile is the longest wait time that remains after the 10% of patients with the longest wait times are removed. The Ministry target is eight hours for total wait time in the emergency room, not for bed-wait time.
3. This wait time measures the total time a patient spent waiting in an emergency room, from the time the patient was triaged to the time the patient was transferred to a bed elsewhere in the hospital for further treatment.
4. Bed-wait time is part of the total wait time a patient spends in an emergency room—the time spent after admission to the hospital for a bed to become available elsewhere in the hospital.

We noted that most of the time the patients spent in emergency rooms was not waiting for an emergency-room physician to diagnose and treat them; rather, the patients were waiting to be transferred to a bed elsewhere in the hospital for further treatment. This issue is discussed in the next section.

4.2.1 Long Wait Times for Beds

We found that many patients had to remain in the emergency room after being seen by a physician because beds in ICUs and other acute-care wards were unavailable. This difference in time between physician's decision to admit the patient to the hospital and the patient's being given a bed is referred to as the "bed-wait time."

Based on 2014/15 data from the three hospitals we visited, we found the following:

- The 90th percentile bed-wait time for patients admitted to the ICU was 17 hours. This means that 10% of patients waited longer than 17 hours, and 90% waited some amount of time under 17 hours. The median time was two hours. This means that half waited less than two hours, and half more than two hours. The bed-wait time of patients admitted to the ICU accounted for about 70% of the total time they spent in the emergency room (refer to **Figure 7**).
- The 90th percentile bed-wait time for patients admitted to other acute-care wards was 28 hours. This means that 10% of patients waited longer than 28 hours and 90% waited some amount of time under 28 hours. The median time was five hours. This means that half waited less than five hours, and half more than five hours. The bed-wait time of patients admitted to other acute-care wards accounted for about 75% of the total time they spent in the emergency room (refer again to **Figure 7**).

We noted that the large difference between the median and 90th percentile for admission to the ICU suggests that most cases are handled well, while a small minority of difficult cases and occasional periods of overflow extend the average time. This suggests that a crisis response system is needed to better handle difficult cases and huge case volumes.

We also found that bed-wait time varied depending on the nature of a patient's illness or injury, and the patient's age. For example:

- Patients, many of them over 65 years of age, with infections (such as pneumonia),

stroke, chronic heart disease, or kidney or respiratory conditions are usually admitted to medicine-ward beds, and they experienced the longest waits—the 90th percentile wait time was about 35 hours (median wait time 10 hours)—due to higher occupancy rates, at 108%, in medicine-ward units. Once these units are occupied at 100% capacity, any additional patients are placed in "overflow" beds in other dedicated units (refer to **Section 4.4** for further details).

- In comparison, the 90th percentile wait time for beds in other wards ranged from two hours for obstetrics (median wait time half an hour) to 22.5 hours for mental health care (median wait time two hours). Occupancy rates in these wards ranged from 41% to 98%. Mental health patients wait a long time at the emergency room to be transferred to the mental health units. The primary reason is that mental health patients typically occupy their beds for longer periods due to the complexity of their health conditions, leading to a slower turnover of beds and fewer beds being available at any given time. In 2015/16, at the three hospitals we visited, mental health patients stayed on average 14.6 days, compared to 8.9 days for patients in medicine wards and 5.1 days for patients in post-surgical wards.

The Ministry has no standards for how long it should take to transfer a patient from the emergency room to an acute-care bed once a physician has admitted the patient to the hospital. However, we found that the actual bed-wait times for ICU and other acute-care beds were two and 3½ times longer, respectively, than the eight hours recommended by the Canadian Association of Emergency Physicians.

Delays in transferring a patient from emergency to an acute-care ward sometimes happen because all beds are full, or an available bed has not yet been cleaned. Delayed internal communication about bed availability can also contribute to longer bed-wait times. Delays in the transfer process are further discussed in **Section 4.4**.

4.2.2 Emergency Rooms Are Overcrowded

Emergency rooms often get overcrowded due to a backlog of patients awaiting beds elsewhere in the hospital. At the hospitals we visited, we saw patients placed on uncomfortable stretchers or gurneys in hallways and other high-traffic areas that were never designed for patient care. As we noted in the previous section, these waits can last as long as 28 hours for a minority of patients.

Overcrowded emergency rooms also make it difficult to control infections. The first Canadian to die in the 2003 SARS outbreak, for example, was infected after spending one night in a hospital emergency room.

Overcrowding also causes budget overruns by creating a need to bring in additional nurses to care for the high number of patients, including those waiting for beds. At the three hospitals we visited, emergency rooms were consistently among the top units for nurse overtime and agency replacement costs. See **Section 4.6.2** for more on this issue.

RECOMMENDATION 2

To better ensure timely transfer of patients from the emergency room to an acute-care bed when needed, hospitals should:

- monitor the bed-wait time by acute-care wards on a regular basis;
- investigate significant delays;
- develop a crisis response system to better handle difficult cases and high case volumes; and
- take corrective actions as necessary.

RESPONSE FROM HOSPITALS

We agree with the recommendation. Hospitals have in place systems and practices to frequently (more than daily) monitor bed wait time. Significant delays are monitored and patients are

prioritized based on length of wait and acuity. Formal escalation and triaging practices are in place, and corrective actions are initiated when appropriate. Hospitals are working with community partners, such as Local Health Integration Networks and Community Care Access Centres, to find solutions for those patients who no longer need to be in the hospital but don't have an appropriate place to go. These patients, who need an alternate level of care (ALC), are occupying the beds needed for acute patients. High ALC rates are one of the key contributors to the long wait times experienced by patients waiting to be seen in the emergency room or waiting for a bed.

4.3 Long Surgical Wait Times Put Patients at Risk

We reviewed a sample of surgical cases between January 2013 and January 2016 at the three hospitals we visited, and found delays in emergency surgeries (**Section 4.3.1**) that put patients at risk. We also found that patients waited too long for some of the more urgent elective surgeries (**Section 4.3.2**). Our observations are outlined below.

4.3.1 Patients Waiting Too Long for Emergency Surgeries

As part of the Wait-Time Strategy announced in 2004, the Ministry established guidelines for how quickly emergency surgeries should be performed. However, it did not translate the guidelines into formal targets for hospitals to report against, and therefore does not know whether the guidelines are being met. **Figure 8** provides examples of emergency surgeries and the Ministry's clinical wait-time guidelines for them.

These clinical wait-time guidelines are extremely important to follow because an hour's (or even minutes') delay in surgery can decrease a patient's chance of survival and/or jeopardize a patient's quality of life. For instance, patients with critical or life-threatening conditions such as bleeding in the brain or accumulation of fluids in the abdomen require immediate emergency surgeries within two hours or risk permanent brain damage

Figure 8: Clinical Guidelines on Wait Times for Emergency Surgeries

Source of data: Ministry of Health and Long-Term Care

Clinical Wait-Time Guideline*	Health Conditions That Require Emergency Surgery
Within 0–2 hours	**Patients with critical or life-threatening conditions** Conditions that pose a risk to life or limb requiring surgical intervention as soon as preparations can be made. These cases can bump other less urgent cases from the operating-room schedule. For example: • Established ruptured vessel/aneurysm • Critical airway obstruction • Rapidly deteriorating neurological status • Compound fracture with bone protruding through the skin or lacerated major artery • Abdominal compartment syndrome
Within 2–8 hours	**Patients with conditions that require surgery as soon as possible** Acute conditions where surgery on a timely basis would lead to better outcomes. These cases typically do not bump other less urgent cases from the operating-room schedule. For example: • Open fractures/fracture dislocations • Bleeding ectopic pregnancy • Bowel obstruction, incarcerated hernia • Acute appendicitis • Intra-cranial hemorrhage

* Guidelines were established by the Ministry of Health and Long-Term Care's Surgical Efficiency Targets Program as part of a provincial wait-time strategy announced in 2004. Surgeons are responsible for prioritizing each patient based on the urgency of the patient's condition.

or multiple organ failures. In some cases, delay in performing these surgeries can lead to death.

Hospitals do not formally evaluate how quickly they perform all emergency surgeries. We found that none of the hospitals we visited consistently track sufficient information to assess the timeliness of surgeries and document reasons for surgical delays.

However, our own assessment of emergency-surgery wait times found that, overall, 38% of patients in our samples who required emergency surgeries did not get them within the time frames recommended by the Ministry. In particular, we found that one in four patients with these critical or life-threatening conditions had to wait four hours on average to undergo surgery that should have started within two hours. In one case, a patient who was suffering from a traumatic brain injury waited a total of 21.5 hours at a hospital before having a surgery. The patient subsequently died. The account of the event is as follows:

- Upon admission, this patient was diagnosed with subdural hematoma with a midline shift—a condition where the accumulated blood has shifted the brain past its centre line. The attending physician assessed the patient as stable but suffering from a critical condition. Based on the surgeon's clinical judgment, the plan was to proceed with surgery the following day.
- The next morning, the surgeon, jointly with another surgeon, reassessed the patient to be clinically stable. However, two elective surgeries were prioritized to be completed before this case. During the waiting period, the patient's condition suddenly deteriorated; the patient went into a coma and required emergency surgery. The patient did not recover and died four days later.

Other patients with conditions not as life-threatening as the case mentioned above still require surgery within two to eight hours. This two-to-eight-hour guideline is crucial to follow. In a case of acute appendicitis, for example, the appendix might rupture, leading to serious infection and possibly death.

At the three hospitals we visited, we found that 47% of patients had to wait on average over 10 hours more than the Ministry's two-to-eight-hour guideline. In one case, a patient who was suffering from abdominal pain waited a total of 25 hours at a hospital before having a surgery, and the patient had to stay in the hospital twice as long as necessary. Specifically:

- Upon admission, the patient first waited 7.5 hours overnight in the emergency room for a diagnosis of acute appendicitis to be made.
- The patient was seen by a surgeon and a 2-8 hour surgical priority was booked.
- The patient waited another 17.5 hours for surgery to be completed. During this time, other emergency cases and less urgent cases were done. At the time of the surgery, the surgeon noted that the patient's appendix was perforated. The patient stayed in hospital for a total of eight days instead of the typical four that would be expected for this type of surgery due to a surgical complication.
- This patient was readmitted with a post-surgical infection three days after being discharged and remained hospitalized for another seven days.

These delays in emergency surgery not only cause prolonged and unnecessary suffering for patients, but they also use hospital resources unnecessarily.

We found that availability of operating rooms and/or surgeons was the biggest challenge to timely emergency surgeries. We discuss this in the section that follows.

Emergency Surgery Patients Not Always Given First Priority

We found that the leading cause of long surgical wait times is that emergency surgeries have to compete with elective surgeries for operating-room time.

All three hospitals we visited have internal policies that allow the most urgent emergency surgeries to bump all others in order to use the next available operating room. However, other types of emergency surgeries typically have to wait until after 3:00 p.m., when that day's elective surgeries have been completed (similar to the patient with acute appendicitis who waited 25 hours, mentioned above), or wait for a slot after hours or on the weekend. For example:

- Three of the six hospital sites we visited do not have dedicated operating-room time set aside for emergency surgeries during daytime on weekdays. The other three sites we visited have dedicated operating-room time for only one to two emergency procedures.
- When operating rooms are in use (not including planned closures discussed in **Section 4.3.2**), we found a high utilization rate at the three hospitals we visited, ranging from 92% to 100%, compared to the 85% to 90% clinical best practice recommended by an advisory committee of an expert panel to the Ministry. This means that, aside from planned closures such as weeknights and weekends, the operating rooms are almost fully booked back to back and have limited ability to respond to emergency cases, resulting in surgery delays.

We also analyzed the three hospitals' data for 2014/15 and found that there is a higher chance of surgeries being performed on time, whenever there is dedicated operating-room time for emergency surgeries. For example:

- At one hospital, emergency cases booked during the Christmas holiday and summer breaks (when operating rooms are not scheduled for elective surgeries) were done within the recommended time frames—in other words, on time—84% of the time, compared to 69% at all other times.
- Conversely, at another hospital, emergency surgeries requested during daytime hours, when there are elective surgeries scheduled, were 37% more likely to be performed outside the recommended time frame—that is, not on time—than those requested at night.

We also noted that 62% of the 54 large community hospitals we surveyed allow their surgeons to schedule elective surgeries during times that they are on call for emergency cases. This is problematic, because the on-call surgeon might not be available if he or she is performing an elective surgery when an emergency case arises. This conflict in scheduling surgical cases contributed to the 21.5-hour wait time of the patient with a brain injury, mentioned above.

We observed that although the current scheduling of operation room and surgeon times gives hospital staff such as surgeons, nurses and other operating room personnel the convenience of a predictable daytime work schedule, this system limits flexibility and makes it very difficult for the hospital and surgeons to respond to unexpected emergency surgical situations on a timely basis.

RECOMMENDATION 3

To better ensure the equitable and timely treatment of patients requiring emergency surgery, hospitals should:

- on a regular basis, track and assess the timeliness of emergency surgery performed;
- document and analyze the reasons for delays in performing emergency surgery; and
- evaluate dedicating emergency-surgery operating-room time and/or take other measures, such as ensuring surgeons perform only emergency surgeries while they are on call, as part of their regular planned activity, in order to reduce the risk that emergency-surgery delays result in negative impacts on patient health.

RESPONSE FROM HOSPITALS

We agree with the recommendation. Hospitals will review their methods for tracking and analyzing the timeliness for emergency surgeries.

In conjunction with this review, hospitals will ensure that adequate controls are in place to enable all reasons for delays to be documented accurately. When reviewing wait-time targets versus performance, hospitals will determine whether more operating-room time should be dedicated to emergency surgeries or whether surgeons' schedules need to be revised. The operational feasibility of revising either operating-room time or surgeons' schedule may require realignment of the funding model and/or the Ontario Health Insurance Plan's fee schedule for surgeons.

4.3.2 Patients Waiting Too Long for Some Urgent Elective Surgeries

Although not rated as emergencies, some elective surgeries may still be quite urgent. These include, for example, surgeries to remove some types of aggressive cancerous tumours that should be done within two weeks of discovery to maximize a patient's long-term chances.

Surgeons schedule and prioritize elective surgeries taking into account such factors as the urgency of the case, patient preference, the times the surgeon has available and availability of hospital operating rooms.

The Ministry sets formal targets for elective surgeries, and requires each hospital to submit wait-time performance data on a monthly basis. We reviewed this data for the past five years province-wide and found that:

- wait times for elective surgeries have not improved over time; and
- hospitals are struggling to meet the Ministry's wait-time targets for the most urgent elective surgeries.

Figure 9 summarizes elective-surgery wait-time performance for large community hospitals in 2015/16 by type of surgery. The Ministry requires 90% of the surgeries to be performed within the wait-time target assessed for each type of surgery and level of urgency. As the figure shows, the more urgent the surgery, the less likely it is to be performed within the wait-time target. For example:

- Only 33%, not 90%, of highly urgent neurosurgeries were completed within the Ministry's 28-day wait-time target. With the top 10% of patients with the longest wait time removed, the 90th percentile wait time was 63 days, not 28 days, in 2015/16.
- Only 60%, not 90%, of highly urgent oral and dental surgeries were completed within the Ministry's 14-day wait-time target. With the top 10% of patients with the longest wait time removed, the 90th percentile wait time was 68 days, not 14 days, in 2015/16.

Frequent Planned Operating-Room Closures

The availability of operating rooms is a factor in the long wait time for some elective surgeries, as is competition for operating-room time between elective and emergency surgeries. In particular, at the three hospitals we visited, we found that although most sites had nine to 12 operating rooms, only one at each site remained open on evenings and weekends, and these were dedicated to emergency surgeries only. With respect to the hospitals we surveyed, we found that a majority of hospitals typically have planned operating-room closures on statutory holidays, over the March break, and for two to 10 weeks during the summer, in addition to weeknights and weekends. About 45% of hospital survey respondents also indicated that one or more of their operating rooms were not currently in use because of funding constraints. Our physician survey results confirmed the same.

Over half of the surgeons who responded said that their hospitals have no policy to schedule elective surgeries on evenings and weekends due to funding constraints. It is costly for the hospitals to have, for example, sufficient nursing and supportive staff and anesthesiologists on duty for all operating rooms after hours.

Figure 9: Large Community Hospitals' Wait-Time Performance for Adult Elective Surgeries, 2015/16

Source of data: Ministry of Health and Long-Term Care, Cancer Care Ontario

Type of Surgery	Level of Urgency[1]	Median Wait Time–Actual (Days)	90th Percentile Wait Time–Target (Days)	90th Percentile Wait Time–Actual (Days)	Percentage of Cases Completed within Wait-Time Targets[2] (%)
Neurosurgery	High	13	7–28	63	**33**
	Medium	30	56–84	86	**78**
	Low	36	182	108	98
Oral and Dental Surgery	High	10	14	68	**60**
	Medium	43	84	104	**84**
	Low	53	182	145	94
Thoracic Surgery	High	9	14	26	**62**
	Medium	18	84	38	99
	Low	31	182	83	99
Vascular Surgery	High	8	14	27	**73**
	Medium	24	28–56	67	**80**
	Low	36	182	145	95
Orthopedic Surgery	High	21	7–42	78	**75**
	Medium	53	56–84	180	**71**
	Low	65	182	181	90
Gynecologic Surgery	High	18	28	53	**75**
	Medium	40	84	113	**83**
	Low	51	182	132	96
Ophthalmic Surgery	High	15	7–42	77	**75**
	Medium	37	42–84	134	**84**
	Low	62	84–182	187	**89**
Cancer Surgery	High	8	14	23	**78**
	Medium	17	28	32	**86**
	Low	29	84	63	96
General Surgery	High	13	14–28	33	**86**
	Medium	30	84	74	93
	Low	42	182	113	98
Urologic Surgery	High	10	28	33	**86**
	Medium	23	84	61	96
	Low	34	182	91	98
Otolaryngic Surgery (ear, nose and throat/head and neck)	High	18	28–56	64	**87**
	Medium	46	70–112	118	**89**
	Low	59	182	165	92
Plastic and Reconstructive Surgery	High	6	28	29	90
	Medium	33	84	83	90
	Low	48	182	144	94

1. High, medium and low urgency are our categories; they are equivalent to priority 2, 3 and 4, which are the categories used by hospitals and the Ministry of Health and Long-Term Care (priority 1 is emergency surgery and therefore not applicable to this figure).
2. The Ministry requires 90% of cases to be completed within the wait-time target. The types of surgeries that are not meeting the 90% target are in bold.

RECOMMENDATION 4

To ensure patients receive urgent elective surgery on a timely basis, the Ministry of Health and Long-Term Care (Ministry) should:

- review the relationship between the level of funding provided for urgent elective surgeries, the wait-time targets for those surgeries, and the difficulties hospitals are facing achieving those targets within the level of funding provided; and
- using the information from this review, determine future urgent-elective-surgery funding needs, such that the risk to patients is addressed and hospitals are enabled to achieve the Ministry's urgent-elective-surgery wait-time targets.

MINISTRY RESPONSE

Recognizing and supporting excellence in health care is part of the government's Patients First: Action Plan for Health Care. To ensure patient access, the Ministry works with Local Health Integration Networks (LHINs) to determine local need and the projected volume of required procedures.

As part of the 2016 Budget, Ontario invested more than $345 million into all publicly funded hospitals to provide better patient access to high-quality health care services. Among the targeted investments was $50 million to improve access and wait times for hospital services, including additional procedures, such as cataract surgeries, and knee and hip replacements.

The Ministry works closely with LHINs each year to determine how additional Quality-Based Procedure (QBP) funding is allocated. The LHINs have discretion to reallocate funding and volumes across hospitals and QBPs based on local needs.

The Ministry is currently working with the LHINs to develop a methodology that reflects local funding requirements for urgent elective surgeries.

RECOMMENDATION 5

To continue to make the most effective use of hospital resources within funding constraints, and to better ensure that patients get urgent elective surgeries within the wait-time targets established by the Ministry of Health and Long-Term Care (Ministry), hospitals should consult with the Ministry and the Local Health Integration Networks (LHINs) when necessary, and work with surgeons to identify ways to alleviate the backlogs, such as scheduling some elective surgeries for times other than typical daytime business weekdays.

MINISTRY RESPONSE

Although the Ministry provides funding for hospitals through Local Health Integration Networks (LHINs), hospitals are independent corporations. As set out under the *Public Hospitals Act* and other legislation, hospitals are directly responsible for day-to-day management, including decisions about scheduling health services. Hospitals can fund additional volumes during the year or redistribute funding between programs to ensure that services continue to be aligned with patient needs.

The Ministry regularly reviews hospital performance and holds quarterly stock-taking meetings with LHIN leadership to review performance issues—including hospital efficiency data—and discuss how to address challenges.

RESPONSE FROM HOSPITALS

We agree with the recommendation. Hospitals are continuously balancing the performance of medically necessary planned elective surgeries, emergency (unplanned) surgeries and physician schedules, while ensuring that volume targets for surgeries in the Hospital Service

Accountability Agreement are met and the associated funding provided by the LHINs is not exceeded. Hospitals will continue to look at ways to balance these competing priorities with the aim of reducing wait times. Hospitals will work with the Ministry and surgeons to identify opportunities to reduce wait times and alleviate backlogs in the context of current labour, physician and funding constraints.

Wait Time for Elective Surgeries Varies across Ontario

The time a patient must wait for surgery depends on which surgeon the patient is referred to. For example, the difference in 90th percentile wait times (after 10% of patients with the longest wait time are removed) for ear, nose and throat surgery between two hospitals just 100 kilometres apart was 127 days—the wait time was almost four months, or 113 days, at one hospital versus eight months, or 240 days, at another.

Although eight of the 14 LHINs across Ontario currently have central referral services for hip- and knee-replacement surgeries in their regions, there is no centralized system in place for booking other types of elective surgeries. Instead, individual surgeons manage their own surgery wait lists—and some have longer wait lists than others because they are well known or because of recurring referrals from family physicians.

While Alberta, British Columbia, Saskatchewan and Nova Scotia publicly report wait times by individual surgeons for all types of surgeries, Ontario currently does not. The lack of wait-time information for each surgeon means that Ontarians are not aware of this situation and that their physicians do not have the information to be able to refer their patients to another surgeon with a shorter wait list, or to another facility that could offer treatment and/or consultation sooner.

Misleading Elective Surgery Wait-Time Information

The Ministry publicly reports wait-time performance by hospital for all 12 types of elective surgery. However, we found that the way the Ministry presents this information on the public section of its wait-time performance website is misleading.

The Ministry does not, for example, report wait-time performance by level of urgency. Wait time targets for individual procedures vary widely, depending on how urgently the surgery is needed—the more urgent the case, the shorter the target. However, the Ministry reports wait times for all urgency levels against only the least urgent and therefore longest wait-time target. **Figure 10** shows two examples of the way the Ministry publicly presents hospital wait-time performance. For the example related to hysterectomy surgeries (procedures to remove all or part of the uterus), the Ministry lists a target wait time of 182 days for 90% and an actual wait time of 148 days, indicating that this procedure is being performed on time in a great majority of cases. However, 182 days is the time frame for only low-urgency hysterectomies, and the actual wait time for them is 156 days; medium-urgency hysterectomies are supposed to be performed within 84 days, and the actual wait time for them is 132 days. High-urgency hysterectomies are supposed to be performed within 28 days and the actual wait time for them is 65 days.

Unlike other jurisdictions such as Nova Scotia and the United Kingdom, Ontario does not report full wait times. Before a surgery can be booked, a patient must first be assessed by a specialist to determine the type of surgery needed and how urgently it is required. Although the Ministry does track the time a patient waits for a specialist consultation, it does not report it publicly or include it in its wait times for surgeries.

Wait times to see specialists vary, and if this period were taken into account, it would add months to the wait time for some surgeries. **Figure 11** summarizes both median and 90th percentile wait times to see a specialist by type of surgery in 2015/16.

Figure 10: Two Examples of How Wait-Time Information Is Publicly Reported by the Ministry of Health and Long-Term Care For Ontario Hospitals, December 2015–February 2016

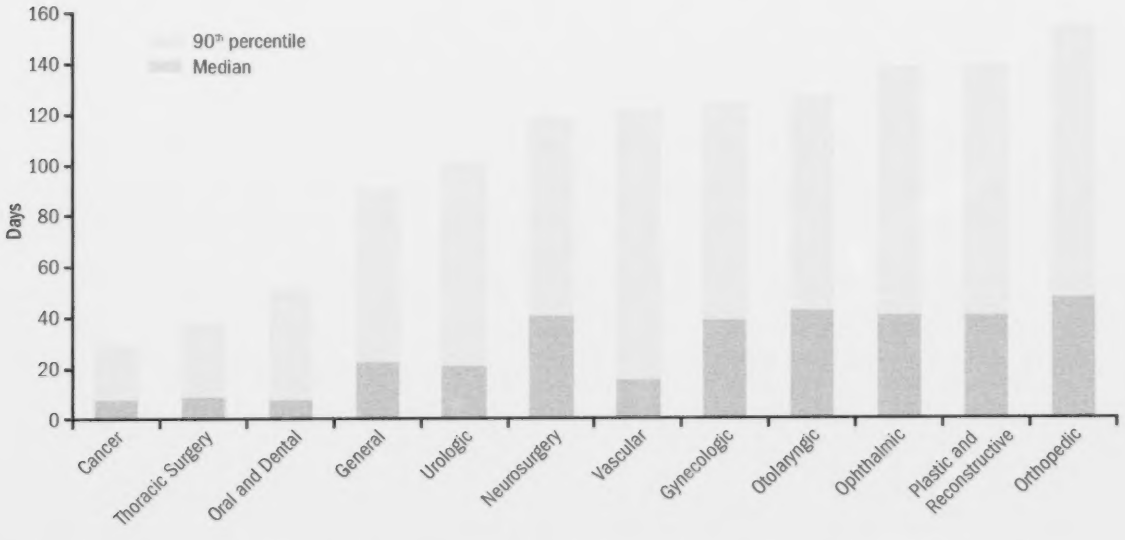
Source of data: Ministry of Health and Long-Term Care

	Level of Urgency	Target Wait Time for 90% of Cases (Days)	Actual Wait Time for 90% of Cases (Days)	Performed Within Target?
Adult Hysterectomy Surgery*				
Information shown on the public section of the Ministry's wait-time reporting website	Not shown	182	148	Yes
Actual wait-time information broken down by urgency level (this information is not shown on the public section of the Ministry's wait-time reporting website)	High	28	65	No
	Medium	84	132	No
	Low	182	156	Yes
Adult Prostate Cancer Surgery				
Information shown on the public section of the Ministry's wait-time reporting website	Not shown	84	79	Yes
Actual wait-time information broken down by urgency level (this information is not shown on the public section of the Ministry's wait-time reporting website)	High	14	20	No
	Medium	28	50	No
	Low	84	84	Yes

* Hysterectomy is a surgery to remove all or part of the uterus.

Figure 11: Median and 90th Percentile Wait Time to Consult a Specialist, by Type of Surgery, 2015/16

Source of data: Ministry of Health and Long-Term Care, Cancer Care Ontario



Note: This wait time measures the time between a family physician's referral and the appointment with a specialist. At the time of our audit, the Ministry has started to collect data on actual wait time to consult a specialist by urgency level for each type of surgery.

This wait time measures the time between a family physician's referral and the appointment with a specialist. The 90th percentile wait time ranged from 30 days to consult a specialist for cancer surgery to 155 days to consult an orthopedic surgeon for bone- and joint-related surgery. Because the Ministry does not publish these wait times, the public is missing a large part of the wait time picture. For example, 90% of orthopaedic surgery patients waited, on average, 155 days to see a specialist. Depending on the urgency level decided on by the specialist, patients could then wait another 78 to 181 days to actually receive their surgery, potentially extending their total wait time to almost a year. At the time of our audit, the Ministry has started to collect data on actual wait time to consult a specialist by urgency level for each type of surgery and use this to measure against its wait time targets.

RECOMMENDATION 6

To help ensure that both patients and healthcare providers make informed decisions, and that patients undergo elective surgery within an appropriate time, the Ministry of Health and Long-Term Care (Ministry) should work with hospitals to:

- implement a centralized patient referral and assessment system for all types of elective surgeries within each region;
- break down the wait-time performance data by urgency level for each type of elective surgery on the Ministry's public website; and
- publicly report the complete wait time for each type of surgery, including the time from the date of referral by family physician to the date of a patient's appointment with a specialist.

MINISTRY RESPONSE

The Ministry has conducted a review of the existing orthopaedic Central Intake and Assessment Centre (CIAC) models. These models streamline the intake process by determining whether a surgical consultation is appropriate, leading to more timely access to specialists. Patients requiring a surgical consultation are assigned a surgeon based on their choice, their referring physician's choice, or the first available surgeon with the lowest wait list.

The Ministry is working to standardize reporting and practices among current CIAC models and is considering expanding to additional Local Health Integration Networks. In addition, the Ministry will consider whether to increase the scope of the existing models to include other procedures, such as foot and ankle surgery, and other specialties.

Since 2005, the Ministry has publicly reported monthly wait-time data; wait times for over 200 surgical procedures are available and reported online as "Wait 2" (the time from the decision to treat to the date of surgery).

The time from the date of referral to the date of surgical consultation with a specialist is referred to as "Wait 1." The Ministry is working closely with key stakeholders to develop a plan to publicly report this information. As part of the government's Open Health Initiative, the Ministry is working to publicly report in late 2016/17 the wait time for consultations with a surgical specialist. This reporting will be in addition to the current public reporting of wait-time data for surgical and diagnostic-imaging procedures.

There are a number of components involved in reporting this data publicly, including: ensuring data quality, interpretation of the data, engaging clinicians to understand the data and building the online infrastructure to publicly report it.

The Ministry is also following through with its commitment to address wait times for specialists and specialist services with a multi-year strategy that will address access, capacity and quality.

RESPONSE FROM HOSPITALS

We agree with the recommendation and will support the Ministry in its efforts to develop centralized referral and assessment systems with the aim of reducing patient wait times. Hospitals support the public reporting of wait times, including the time from date of referral by the family physician, and will support the Ministry in all wait-time reporting initiatives.

RECOMMENDATION 7

To ensure patients receive timely elective-surgery consultation from a specialist, the Ministry of Health and Long-Term Care (Ministry) should identify the reasons why there is a long wait for some specialists and work with the Local Health Integration Networks (LHINs), hospitals and specialists to improve wait time and access to specialists and specialist services.

MINISTRY RESPONSE

The Ministry acknowledges this recommendation and is committed to addressing wait times for specialists and specialist services with a multi-year strategy that will address access, capacity and quality. The Ministry will continue to work with the Local Health Integration Networks (LHINs) to determine ways to address wait times and risks to patients.

This Ministry has collected Wait 1 (date of referral to the date of surgical consultation with a specialist) data since 2012 and shares monthly Wait 1 summary reports with LHINs and hospital partners to help identify and address wait-time concerns.

In addition, Ontario collects and reports wait times for over 200 surgical procedures performed by over 3,000 surgeons in Ontario each year. To support LHINs in understanding how providers contribute to better access for patients, a LHIN Surgeon Wait Time Report, with information related to consultation and surgery, is shared quarterly. The report focuses on wait times for high-volume priority procedures, such as cancer surgery, hip and knee replacement surgery, and cataract surgery, and allows for comparisons. A surgeon Scorecard is also provided directly to the surgeon to help manage their practice by providing wait-time data for surgical patients. The intent of the Scorecard is to help increase surgeons' awareness of their wait-time data and help drive further improvements in wait times and backlogs.

This fall, the Ministry reintroduced the *Patients First Act, 2016*, (Bill 41) that, if passed, should improve access to health care services by putting patients at the centre of an integrated health system. The *Patients First Act, 2016*, proposes to give LHINs an expanded role, including responsibilities for primary-care planning, and home and community care services delivery. If Bill 41 is passed, LHINs will become the single point of accountability for the effective integration of services at the local level. Smaller sub-regions would become the focal point for local integration and collaboration, and provide an opportunity to improve primary-care access, including access to specialists.

4.3.3 Poor Surgical-Safety Performance

Ontario patients have a relatively high incidence of health problems and risks that could be more effectively managed with better quality-of-care practices. We identified two surgical-safety related problems that Ontario hospitals do not manage or prevent as well as hospitals outside Ontario.

According to 2013 data from the Canadian Institute for Health Information, Ontario ranks behind most developed countries on the following measures of patient safety in acute-care settings (data compiled by the Organisation for Economic Co-operation and Development, or OECD):

- **Post-operative pulmonary embolism**—A pulmonary embolism is a blockage in the lung, often caused by a blood clot, that can

damage the lung and other organs, and even lead to death. Leg or hip surgery is one of the risk factors for blood-clot blockage, as is having to stay in bed after surgery. There are ways to predict its likelihood and prevent clots after surgery, including medication and making the patient active as soon as possible after surgery. Ontario hospital patients aged 15 and over have a relatively higher incidence of post-operative pulmonary embolism after hip- and knee-replacement surgeries than patients in other OECD countries: 679 cases per 100,000 patients discharged, compared with 660 Canada-wide and 362 for the 34 other OECD countries.

- **Objects left inside surgical patients:** Objects such as sponges or pieces of other medical tools that are inadvertently left in a patient after surgery can cause internal bleeding, infections, other complications or death. Ontario surgical patients aged 15 and over experienced a relatively higher rate of errors per 100,000 discharges than patients in other OECD countries: 7.5, compared with 4 for the 34 other OECD countries (the Canada-wide rate is 8.6).

At the time of our audit, the Ministry did not know which hospitals contributed to the poor surgical performance in Ontario, nor has it taken any specific actions to address this shortcoming.

RECOMMENDATION 8

To ensure the safety of surgical patients, the Ministry of Health and Long-Term Care should work with hospitals to ensure hospitals regularly monitor patient incident occurrences and take corrective actions as necessary.

MINISTRY RESPONSE

The Ministry takes this recommendation very seriously and has several established requirements for the ways in which hospitals must handle critical incidents and reduce the risk of similar incidents in the future.

A regulation under the *Public Hospitals Act* specifies requirements for hospitals when responding to a critical incident, including disclosure to their Medical Advisory Committee, the hospital administrator and the affected patient or their substitute decision-maker, as soon as practically possible. The hospital board is required to ensure that the hospital administrator establishes a system for analyzing the critical incident and developing a system-wide plan to avoid or reduce the risk of further similar incidents. Also, the board ensures that the administrator provides aggregated critical-incident data to the hospital's quality committee at least two times per year. Under the *Excellent Care for All Act, 2010*, the hospital must consider this aggregated critical-incident data when developing its annual Quality Improvement Plan.

All Ontario hospitals are required to report critical incidents relating to medication or intravenous fluids through the National System of Incident Reporting, a web-based tool that allows users to report, analyze and share information on patient safety incidents. The reporting must occur within 30 days following the incident, and the data is analyzed by the Canadian Institute for Health Information. This data helps to inform quality improvement at local, provincial/territorial and national levels.

All Ontario hospitals are also required to publicly report on 10 patient safety indicators, including surgical-site infection prevention and surgical safety checklist compliance.

Health Quality Ontario supports hospitals in improving surgical care in Ontario through the Ontario Surgical Quality Improvement Network. A key component of participation in the network is the implementation of the National Surgical Quality Improvement Program, which was created by the American College of Surgeons. This

peer-to-peer initiative has been shown to deliver better patient outcomes, shortened hospital stays and fewer surgical complications per year.

RESPONSE FROM HOSPITALS

We agree that oversight of quality of care and safety incidents across the health-care system is a critical component in ensuring the safety of all patients, including surgical patients. The hospital board of directors has oversight responsibility for patient safety. Each board has a Medical Advisory Committee to which hospital administrators report critical incidents. In addition, most boards also have a Quality of Care and Patient Safety Committee dedicated to oversight in these areas and for the hospital's Quality Program. These committees, which report to the board, regularly review key quality of care and safety indicators and all critical incidents, including those from the surgery program. At the operational level of a hospital, processes, systems and practices are in place to record, report, investigate and remediate errors to reduce the likelihood of such incidents happening to other patients. This includes the use of software to support incident management.

4.4 High Bed Occupancy Rates Can Contribute to Higher Patient Infection Rates

Occupancy rates vary significantly among different acute-care wards within a hospital. **Figure 12** shows that, of the 57 large community hospitals, 60% of all medicine wards had an occupancy rate (the percentage of available beds occupied by patients) of 85% or more, whereas only 2% of all obstetrics wards had this same high occupancy rate during 2015/16.

There is much research to show that occupancy rates higher than 85% not only result in longer wait times for hospital beds in acute-care wards, but also increase the risk of transmitting infectious disease.

Hospital executives we interviewed explained that outbreaks of infections are more frequent and more severe when patient density is high because it becomes more difficult to comply with infection control and prevention standards.

One example of hospital-acquired infection is sepsis, a life-threatening complication of infection. Data from the Canadian Institute for Health Information as of the 2014/15 fiscal year shows Ontario had the second-highest rate of sepsis in Canadian hospitals after the Yukon—4.6 cases per 1,000 patients discharged in Ontario, compared to an average of 4.1 for other Canadian provinces.

Hospitals Need to Reallocate Funding on an Ongoing Basis to Avoid Deficit Due to "Overflow" Beds

In addition, occupancy rates higher than 100% indicate that hospitals are accommodating patients in temporary "overflow" beds. Hospitals are required to accept a person as an in-patient if the person has been admitted in accordance with the regulations, and the person requires care that is provided by the hospital. In other words, hospitals are not allowed to turn away patients due to overflow occupancy

Figure 12: Bed Occupancy Rate at 57 Large Community Hospitals, by Selected Acute-Care Wards, 2015/16
Source of data: Ministry of Health and Long-Term Care

	Acute-Care Ward (%)				
Range of Bed Occupancy Rate (%)	Medicine	Surgical	Intensive-Care Unit	Pediatric	Obstetric
>100	29	6	4	2	1
Between 85 and 100	31	30	25	2	1
<85	40	64	71	96	98
Total	**100**	**100**	**100**	**100**	**100**

rates. Hospitals generally are funded based on the number of patients treated, their acuity, and the expected cost of providing services, rather than the number of beds that they have. However, there is a time lag on the funding; hospitals would be funded for the overflow after two years. This means that hospitals often have to divert funding from other areas to cover the operating costs of overflow beds during the current fiscal year in order to balance their budgets. **Figure 12** indicates that in 2015/16, all five categories of acute-care wards in Ontario's 57 large community hospitals had experienced, on a combined basis, an over 100% occupancy rate; in particular, 29% of medicine wards had an occupancy rate over 100% in 2015/16.

One hospital we visited, for example, operated the equivalent of nine overflow beds when it was over 100% occupancy during the 2014/15 fiscal year. These beds are located in other units dedicated for overflow beds. The direct costs of operating these beds totalled $1.45 million for the year ($733,000 for diagnostic and therapeutic services, $587,000 for direct patient care and $128,000 for food).

4.4.1 Bed Shortages Caused by Patients Waiting in Hospital for Other Types of Care

One reason for high occupancy rates in acute-care wards is that about 14% of hospital beds in the province are occupied by alternate-level-of-care patients—people who no longer require hospital care but who must remain there until a bed becomes available in another setting such as a long-term-care home.

Figure 13 breaks down all the different discharge destinations for the approximately 4,110 alternate-level-of-care patients waiting in all Ontario hospitals during 2015/16. As of March 31, 2016, about 45% were waiting for long-term-care-home beds while occupying the more expensive acute-care beds in hospitals. Another 19% were waiting for rehabilitation, complex-continuing care, or convalescent care hospitals, while 15% were waiting for provincial subsidized home-care services to be available at patient's home. The remaining 22% were waiting for group home, retirement home, palliative hospice, or other types of supportive housing.

The median wait time for patients awaiting long-term-care home placement has increased from 73 days in 2012/13 to 85 days in 2015/16. In other words, in 2015/16 half the patients waited less than 85 days and half waited longer—however, in 2015/16, the 90th percentile wait time (after the 10% of patients with the longest wait times are removed) was 406 days, a slight improvement from 437 days in 2012/13.

Considering that the average length of stay for a regular acute-care patient is 8.6 days or less,

Figure 13: Discharge Accommodations Needed for Alternate-Level-of-Care Patients Waiting at Hospitals, as of March 31, 2013 and March 31, 2016

Source of data: Ministry of Health and Long-Term Care

Discharge Accommodations Needed	# of Patients Waiting as of March 31, 2013	# of Patients Waiting as of March 31, 2016	% Waiting as of March 31, 2016
Long-term-care home	1,853	1,854	45
Rehabilitation/complex-continuing care/convalescent care hospital	679	775	19
Patient's own home, with CCAC home-care services	560	609	15
Supportive housing, group home, assisted living residence	257	253	6
Retirement home	124	216	5
Other destinations (including palliative care)	423	405	11
Total	**3,896**	**4,112**	**100**

we calculated that hospitals could treat roughly 37,550 patients more each year if alternate-level-of-care patients were not waiting in hospital beds for long-term-care spots.

We found that the high occupancy of acute-care beds was partly due to the right of patients in Ontario to stay in hospital until a spot comes up in the long-term-care home(s) of their choice, even if their preferred choices have long wait lists. (Another reason for this bottleneck is that the supply of long-term-care beds is not able to meet the demand.) In comparison, British Columbia, Manitoba, Newfoundland and Labrador, Nova Scotia and Prince Edward Island all require patients to go to the first available vacant long-term-care-home bed anywhere in the province. Saskatchewan and New Brunswick require patients to take any available long-term-care-home bed within 150 and 100 kilometres away from the patient's home, respectively.

We also noted that although 45% of alternate-level-of-care patients in Ontario hospitals are waiting for placement in long-term-care homes (refer again to **Figure 13**), the Ministry has since 2009 increased funding for temporary transitional beds, convalescent care beds, supportive housing and assisted living services, and has been prioritizing home care over long-term care.

High Cost of Alternate-Level-of-Care Patients Waiting in Hospitals

For the 2015/16 fiscal year, we calculated that keeping about 4,110 alternate-level-of-care patients in hospitals cost the province an additional $376 million, of which $236 million relates to the 1,850 patients waiting for long-term-care homes.

Our calculation was based on the fact that the average cost of an alternate-level-of-care patient occupying a hospital bed is about $730 per day, compared to $130 per day for a bed at a long-term-care home (for the portion funded by the Ministry, net of what the patient pays).

Despite the high cost of keeping such patients in hospital, we found that the Ministry did not have long-term-care capacity-planning in place; nor does it know the future demand for long-term-care beds. As of March 2015, there were close to 19,460 people, including those who were staying in hospitals aged 65 or over, waiting for a long-term-care home bed. As things stand, the Ministry is not in a position to meet the demand for long-term-care homes.

Overly Long Waits in Hospital Expose Patients to Unwarranted Health Risks

Acute-care hospital units are not the ideal setting for patients awaiting other types of care. Many such patients are seniors with health conditions similar to those residing in long-term-care homes.

In a June 2011 report, Dr. David Walker, Provincial Alternate-Level-of-Care Lead to the Ministry, pointed out that patients waiting in hospital until the bed they need becomes available may not get the rehabilitative care they require while they wait. This can lead to physical deterioration, falls and other problems that can result in permanent damage to the patient. We noted the following concerns:

- *Falls*—Two of the three large community hospitals we visited place alternate-level-of-care patients in various acute-care wards throughout the hospital. These two hospitals did not specifically track the number of alternate-level-of-care patients who fall while in hospital because they only track falls by patient wards. At the third hospital, which co-locates all alternate-level-of-care patients to a special patient-care ward, we found that from January 2014 to March 2016, these patients fell 2½ times more often than those living in long-term-care homes in the area.
- *Higher use of anti-psychotic drugs*—Anti-psychotic drugs are used to treat behavioural symptoms of dementia, especially in patients at risk of harming themselves or others. Unlike long-term-care homes, hospitals are not subject to the same stringent legislative

requirements regulating the use of these drugs on patients. Although all patients have their drug use tracked in their medication records and their prescriptions were reviewed periodically, two of the large community hospitals we visited do not have practices in place to review the overall use of anti-psychotic drugs given to alternate-level-of-care patients. At the third, we found that 37% of such patients received anti-psychotic drugs in 2014/15, compared to 31% at long-term-care homes in the same community and 27% at homes province-wide.

- *Infections*—Dr. Walker noted in his report that alternate-level-of-care patients have a higher chance of developing an infection while waiting in hospital for their next phase of care than if they wait at home.

RECOMMENDATION 9

To ensure optimal use of health-care resources for patients requiring hospital care and for those requiring long-term care, the Ministry of Health and Long-Term Care should:

- ensure that alternate-level-of-care patients waiting in hospital are safe and receive the restorative and transitional care they need while they wait;
- evaluate policies in other jurisdictions aimed at placing reasonable limits on the time patients can spend waiting in hospital for beds in long-term-care homes, such as by discharging patients to the first appropriate available home within reasonable proximity; and
- conduct capacity-planning for senior care and address bed shortages, if any, in long-term-care homes.

MINISTRY RESPONSE

Since 2013/14, the Ministry has invested more than $40 million across all 14 Local Health Integration Networks (LHINs) to implement the Ministry's Assess and Restore (A&R) Guideline. The A&R Guideline sets standards and expectations for LHINs, hospitals, Community Care Access Centres and other care organizations delivering A&R interventions to help frail seniors who have experienced a recent, reversible functional loss to recover functional ability so they can continue living in the community. The Ministry expects LHINs and hospitals to ensure that all patients in hospital receive restorative and transitional care that is appropriate to their needs.

Another Ministry initiative is the Interim Bed Short-Stay program (IBP) for individuals who meet the following criteria: they occupy a bed in a public hospital, they no longer require acute care services provided by the hospital, they require an alternate level of care, they are eligible for long-stay admission to a long-term-care (LTC) home, and they are on a waiting list for a long-stay bed in an LTC home.

IBP:

- provides a mechanism to assist the LHINs addressing hospital-emergency-room wait-time and alternate-level-of-care pressures;
- facilitates earlier and faster discharge of hospital patients seeking admission to an LTC home;
- provides a safe and suitable care setting for LTC-home applicants to live in while they wait for a long-stay bed; and
- ensures a continuous "flow-through" so that interim beds are constantly freed up for new applicants from hospitals.

The Ministry is working closely with LHINs to monitor the need for LTC-home beds throughout the province on an ongoing basis, and is currently examining future needs for LTC-home capacity and planning accordingly.

The Ministry is also developing a provincial capacity planning framework to support integrated population-based health planning. The framework will support the Ministry, LHINs and health system partners by providing access

to consistent data and guidance on policy and planning actions. Developing a capacity planning framework will help support the provision of care in the most appropriate setting possible across the health care continuum.

4.4.2 Hospitals Lack Efficient Systems for Allocating Beds

Poor communication between the emergency room and other hospital units can create longer wait times for emergency-room patients who need to be transferred to hospital beds in other units.

One of the hospitals we visited was able to transfer emergency patients to hospital beds in acute-care wards more quickly than the other two because it had an information-technology system for hospital-wide bed management, whereas the other two had only a bed-allocation team to centralize management of in-patient beds.

We also noted that fewer than one-third of the large community hospitals that responded to our survey indicated they had a hospital-wide IT system in place to manage beds.

At hospitals that do not have such systems, acute-care wards need to be individually contacted by telephone, intercom or walkie-talkie, to identify available beds. The onus is on the emergency room to send a patient to a bed in an acute-care ward—the ward cannot pull a waiting patient from the emergency room when the right type of bed becomes available.

In comparison, hospital-wide bed management IT systems reduce bed-wait times because they provide real-time information such as bed availability and the number of patients waiting for each type of bed in each acute-care ward. Such systems also allow two-way communication between the emergency room and acute-care wards.

The databases that hospitals use to track patient information also have an impact on bed management. Physicians are required to estimate how long each patient is expected to stay in hospital, so this information can be used to manage beds by planning discharges appropriately.

We found that two of the three hospitals we visited did not frequently update estimates on expected length of stay for all patients in the database. As a result, they lacked an accurate picture of when patients could be discharged and how many beds would become available. This caused delays in patient discharges, contributing to longer wait times for beds.

RECOMMENDATION 10

To help reduce the time that hospital patients must wait for beds after admission, hospitals should conduct cost-benefit analysis in adopting more efficient bed-management systems that provide real-time information about the status of hospital beds, including those occupied, awaiting cleaning or available for a new patient, as well as the number of patients waiting for each type of bed in each acute-care ward.

RESPONSE FROM HOSPITALS

We agree with this recommendation. For hospitals that do not already have an electronic bed-management system in place, a cost-benefit analysis on implementing a system that provides real-time information about bed status will be conducted.

4.4.3 Poorly Scheduled Admissions and Discharges Cause Longer Bed-Wait Times

At times of high hospital occupancy rates, timing of patient admissions and discharges becomes crucial.

Hospitals have limited control over how many patients are admitted for further care via the emergency room. However, they do have some control over the way they schedule patient discharges and referral admissions (admissions that do not come via the emergency room—**Figure 5** (in **Section 2.5**) illustrates the various ways patients can

"flow" through the hospital) during the day and throughout the week.

Backlogs develop when there is a constant lag between hospital admissions and discharges, as we observed in the three hospitals we visited. This translates to even longer bed-wait times for patients admitted via the emergency room. We noted several issues, as outlined below.

Daily Scheduling Clashes between Admissions and Discharges

At the three hospitals we visited, we found that patients identified as admitted and awaiting a bed from the emergency room usually peak in the evening, between 7:00 p.m. and 11:00 p.m. These patients often face long overnight waits (11.6 hours on average) in the emergency room until a bed in the acute-care ward to which they have been admitted becomes available the next day.

Admissions from referrals are usually concentrated between 6:00 a.m. and 9:00 a.m. This means that at the same time that hospital staff are still busy dealing with the buildup of admissions from the night before in the emergency room, they must also start dealing with that day's scheduled referral admissions.

Hospitals try to maximize the number of daytime discharges, with most occurring between 10:00 a.m. and 4:00 p.m. While it is not practical for most patients to be discharged late in the evening or at night, we found the number of patient discharges starts to drop significantly as early as 4:00 p.m.

High bed-occupancy rates, combined with a low volume of discharges after 4:00 p.m., means that the number of newly admitted patients awaiting transfer to acute-care wards builds in the emergency room throughout the evening and overnight, until more patients are discharged and more beds become available the next day. This backlog cycle repeats every evening.

Referral Admissions Not Evenly Scheduled throughout the Week

The fact that fewer physicians and administrative staff are on duty during weekends affects referral admissions.

On average, about 50% fewer patients are admitted to hospital through pre-scheduled referrals by physicians for general medicine, cardiology and respiratory care on weekends than on weekdays (these three types of patients account for 25% of all patients requiring hospital care).

If referral admissions were evenly distributed throughout the week instead of concentrated from Monday to Fridays, the number of patients to be admitted would be more spread out and therefore alleviate the workload of hospital staff. There would be fewer backlogs and shorter wait times for beds as a result.

Patient Discharges Not Evenly Distributed throughout the Week

While the demand for in-patient beds remains about the same from Monday to Sunday, a drop in patient discharges on weekends means fewer beds become available then and bed-wait times therefore increase.

We found that patients admitted via the emergency room on weekends had to wait, on average, 35 minutes longer than the typical 10-hour wait on weekdays for in-patient beds because there are fewer physicians and support staff on duty during weekends. This staffing situation contributed to 25% fewer daily patient discharges on weekends.

According to physicians and hospital management we interviewed, physicians on duty during weekends might not be comfortable discharging patients who were under the care of other physicians during the week. Hospital officials also informed us that they have fewer administrative staff on duty to support patient discharges on weekends.

We also noted that other health-care institutions such as rehabilitation facilities and long-term-care

homes accept fewer patients on weekends, further adding to backlogs and wait times.

RECOMMENDATION 11

To help reduce the time patients have to wait for beds after admission, hospitals should review the times and days of the week where patients are waiting excessively at admission and discharge, and make necessary adjustments to allow sufficient time for beds to be prepared for new admissions, especially those arriving at peak times.

RESPONSE FROM HOSPITALS

We agree with this recommendation. Hospitals will undertake a review of peak admissions and discharges, and will realign bed cleaning resources where appropriate.

4.4.4 Hospital Beds Not Ready for Patients on a Timely Basis

We found that patients had to wait at least 1½ hours longer in the emergency room for beds in acute-care wards once the day shift ended for housekeeping staff, typically at 3:00 p.m., because there are significantly fewer housekeeping staff on duty during the night shift to clean rooms and prepare beds for new patients.

At one hospital we visited, for example, the number of full-time housekeeping staff on duty dropped from 62 during the 7:00 a.m.–3:00 p.m. shift to just 18 during the 3:00 p.m.–11:00 p.m. shift. At another, the number of full-time housekeeping staff on duty dropped from 58 during the day to 27 during the evening, and then to only five overnight.

We also noted at two of the three hospitals we visited that room and bed cleaning after patients are discharged is mostly done in the order that requests come in; it is not prioritized according to the type of beds that emergency-room patients are waiting for.

For example, a bed in the pediatric ward might be made ready before a bed in a medicine ward, even if there are many emergency-room patients waiting for medicine beds and none waiting for pediatric beds.

About 47% of the large community hospitals that responded to our survey also said they clean rooms and ready beds on a first-come, first-served basis, instead of by demand.

We also noted that 68% said they relied on individual wards in the hospital to request housekeeping for a bed needed for a new patient. This can also contribute to long wait times because staff are often busy discharging patients and may not have time to talk to housekeeping.

RECOMMENDATION 12

To help reduce the time that patients have to wait for beds, hospitals should ensure that a sufficient number of housekeeping staff are on duty to clean recently vacated rooms and beds on a timely basis, and that the order of cleaning is prioritized based on the types of beds most in demand.

RESPONSE FROM HOSPITALS

We agree with this recommendation. Practices are in place to realign bed cleaning resources based on changes in priority and demand. These practices will be reviewed to determine if any improvements can be made without the implementation of an electronic bed-management system. Hospitals will review the adequacy of bed cleaning resources and adjust where appropriate while being fiscally responsible.

4.5 Hospitals' Decision Making on Patient Care Negatively Impacted by the Physicians Appointment and Appeal Process

4.5.1 Appeal Process for Hospitals and Physicians under *Public Hospitals Act* Needs Review

A hospital's professional staff include the physicians, dentists, midwives and Nurse Practitioners who work in the hospital. Professional staff are appointed directly by the hospital's board—they are typically not salaried employees. Instead, they are reimbursed by the Ontario Health Insurance Plan for services they provide to patients at hospitals and wherever else they practise.

Physicians who work as medical staff are given hospital privileges, meaning they have the right to practise medicine in the hospital and use the hospital's facilities and equipment to treat patients without being employees of the hospital. These hospital privileges were originally intended to allow physicians to base their decisions primarily on what is best for the patient and not what is best for the hospital. The *Public Hospitals Act* (Act) of 1990 governs important elements of the physician-hospital relationship.

We have noted some instances where hospitals were not able to resolve human resources issues with physicians quickly because of the comprehensive legal process that the hospitals are required to follow under the Act. In some cases, longstanding disputes over physicians' hospital privileges have consumed considerable hospital administrative and board time that could be better spent on patient care issues.

Hospital Board Responsibilities Regarding Hospital Privileges

The Act makes the hospital board responsible for the following with respect to hospital privileges:

- establishing a medical advisory committee composed of elected and appointed medical staff members, to consider and make recommendations to the board related to medical staff appointments and their privileges;
- appointing and annually reappointing medical staff and determining their privileges;
- revoking, suspending or refusing reappointment of medical staff where necessary; and
- holding formal legal hearings upon request by medical staff in case of disputes or other issues related to hospital privileges.

In addition, the Act allows physicians to appeal a hospital board decision to the Health Professional Appeal and Review Board. The Board hears appeals from medical staff who consider themselves aggrieved by any decision revoking, suspending, or substantially altering their appointment, among others. Both physicians and hospitals have the right of appeal to a court of law from a Board decision.

Therefore, while hospitals can manage their own employees, such as nurses, pharmacists, dieticians and lab technicians, they do not have the same authority to manage physicians without going through the legal process specified by the Act. This legal process is lengthy, cumbersome and costly, and does not put the patients' interests first, as the following examples indicate.

Hospital Management Unable to Meet Its Service and Staffing Needs

The management of one hospital indicated to us that when its service priorities change or resources are transitioned between programs (for example, to shift operating-room time from one type of surgery to another), and the result will mean changes to its professional staff needs, it has no simple mechanism to give notice to affected professional staff members that their relationship with the hospital will change. If the hospital wishes to recommend that a physician move either within the hospital or to another hospital, or to sever its relationship with a physician, the hospital may not be able to do so without triggering appeal rights. The management explained that this is due to restrictions it faces

under the *Public Hospitals Act*, and that it is more time consuming and costly than proposing changes or moves for non-professional staff members, who are employees of the hospital.

The same hospital management also informed us that, under the *Public Hospitals Act*, the hospital privilege system for physicians leaves it without the flexibility to adjust physician and other staffing resources to meet its changing local needs.

Hospital Board Entangled in Conflict with Its Physician

Management from one hospital board told us that it has had to spend about five years in administrative and legal disputes with one of its physicians:

- The hospital board attempted to not reappoint a physician to hospital privileges in 2009 due to numerous conflicts between the physician and the hospital management on a hospital policy, causing disruptions that put patient care at risk.
- The hospital's internal and external independent reviews found that the physician had hindered the functioning of a department within the hospital. Even though the College of Physicians and Surgeons of Ontario's investigation confirmed that the physician failed to follow hospital policies, the hospital board was not able to refuse the physician's reappointment because the physician appealed the decision to the Health Professions Appeal and Review Board.
- Under the *Public Hospitals Act*, the physician was allowed to continue to work at the hospital between 2009 and 2013 while the case was heard. The Health Professions Appeal and Review Board decided in 2013 that the physician was to be reappointed without any conditions.
- The hospital spent over $800,000 in legal fees on the case, equivalent to the annual funding for two in-patient acute beds. Unable to remove the physician's privileges or require the physician to undertake behavioural assessment, hospital management eventually repaired the hostile work environment with the physician over time.

Recent Increase in Legal Disputes

The Canadian Medical Protection Association provides legal advice and defence to physicians when medical-legal issues arise in their work. The types of medical-legal difficulties the Canadian Medical Protective Association can assist physicians with include, among other things, conflicts with hospitals and human resources issues.

We noted that over the past five years, the Canadian Medical Protection Association reported about 2,250 legal cases involving disputes between hospitals and their physicians. The number of cases per year increased 87% in 10 years, from 285 cases in 2006 to 533 cases in 2015.

4.5.2 Co-ordinating with Physicians Is a Challenge for Hospitals

Some hospital managements believe that under the current structure, it is difficult for hospitals to achieve an integration of patient care. For example, physicians at some hospitals have the professional autonomy to choose different brands of medical devices for the same surgical procedure, such as brackets used in knee joint replacement, resulting in variations in practice and costs.

We also found instances, as in the previous section, where hospital management and individual physicians did not work collaboratively, with the result that they were unable to deliver patient-centred health-care services.

Other examples we found focus on more general scheduling and staffing issues. In some of these cases, patients experienced unnecessary inconvenience and delays in treatment, sometimes with extremely serious outcomes. In particular, as we detail in **Section 4.3.1**, the scheduling of surgeons' hours leaves hospitals at different times of day

without the resources to treat emergency patients in a timely manner. Weekend and holiday scheduling of patient services is also not well co-ordinated, as we detail in **Sections 4.3.2** and **4.4.3**. March break and summertime closures also extend the wait for elective surgery for many patients.

Physicians We Surveyed Are Aware of Scheduling and Co-ordination Issues

Our survey of physicians informed us that physicians are also aware of these problems. Some respondents suggested that more collaboration is needed between hospitals and physicians to decide what is reasonable in terms of work hours and compensation. When we asked the physicians in our survey about the scheduling and use of operating rooms, some suggested two operating-room shifts a day and all-day time slots during the summer to better serve patients and hospital staff. Many physicians saw the need to allow more evening and weekend time for surgery.

When asked whether hospitals should be given the authority to schedule their physicians to work when needed to meet patient demand, including evenings and weekends, 58% of the physicians who responded disagreed and felt that physicians should not be forced to work these times. However, as many as 42% of the physicians who responded to our survey agreed with this suggestion.

RECOMMENDATION 13

To ensure that hospitals, in conjunction with physicians, focus on making the best decisions for the evolving needs of patients, the Ministry of Health and Long-Term Care should review the physician appointment and appeal processes for hospitals and physicians under the *Public Hospitals Act*.

MINISTRY RESPONSE

The Ministry accepts this recommendation and will develop, in consultation with stakeholders, a proposal for a review.

RECOMMENDATION 14

To ensure that hospitals are able to make the best decision in response to the changing needs of patients, the Ministry of Health and Long-Term Care should assess the long-term value of hospitals employing, in some cases, physicians as hospital staff.

MINISTRY RESPONSE

The Ministry accepts this recommendation and will develop, in consultation with stakeholders, a proposal for a review.

4.6 More Effective Scheduling of Nurses Needed

Labour is the biggest single expenditure of hospitals, and the majority of hospital staff are nurses. It therefore follows that nurse staffing is an important area in which hospitals should seek efficiencies while maintaining a safe standard of care for patients.

We found that hospitals could be doing more to deploy nurses more efficiently. First, implementation of centralized scheduling systems would cut down on costly overtime and agency nurses without compromising patient care.

Centralized nurse scheduling could also help hospitals avoid some of the cost-saving measures they currently rely on, including scheduling fewer nurses and employing more Registered Practical Nurses than Registered Nurses, as discussed in the following sections.

4.6.1 Hospitals Lack Efficient Nurse-Scheduling Systems

Many studies have shown that scheduling nurses efficiently through a centralized scheduling system can reduce overtime and staffing costs. However, we found that:

- None of the three hospitals we visited had a centralized scheduling system to track and manage individual nurse schedules among all hospital wards.
- Only 27% of the hospitals that responded to our survey had such centralized scheduling systems in place.

At hospitals without a centralized system, each ward must fill in any nurse-staffing shortages on its own, which usually involves asking nurses to work overtime and/or calling an agency for replacements.

For example, when a nurse from a medicine ward calls in sick, that ward will call for a replacement from an agency rather than checking with other wards throughout the hospital to see if they have nurses available.

Although two of the three hospitals we visited have a pool of nurses who fill absences or meet other temporary staff shortage needs, not all hospitals have nursing pools. The ones that do have either been only recently established or do not have a sufficient number of nurses to eliminate the need for costly agency nurses.

The College of Nurses of Ontario provides guidelines for hospitals to make nurse-staffing decisions based on patient condition, the scope of practice and experience of the existing pool of staff, and the work environment. However, we found that hospitals we visited were not always able to make the best informed decisions about staffing levels and scheduling because they did not have systems in place to analyze their staffing data.

In recent years there have been significant increases in nurse-staffing costs, including agency costs, overtime costs and sick leave at these hospitals.

4.6.2 Increased Overtime Leads to Sick Leave and Use of Costly Agency Nurses

Hospitals can employ nurses on a full-time, part-time or casual basis. They pay them the same hourly rates set out in collective agreements regardless of category. For example, Registered Practical Nurses are typically paid a maximum of $34.2 per hour with benefits including pension, whether they are full-time, part-time or casual.

When hospitals require additional nurses, they can bring in temporary nurses through agencies. Agency nurses are not bound by union contracts, and their hourly rates are stipulated in separate agreements between the agencies and individual hospitals.

In general, the maximum hourly agency rate is 27% higher than the collective agreement rate for a Registered Nurse, and 52% higher for a Registered Practical Nurse (rates already accounted for benefits including pension). **Figure 14** outlines employment and compensation for full-time, part-time, casual and agency nurses.

We found that many of the nurses in the hospitals we visited consistently worked significant amounts of overtime. Additional nursing hours at one hospital totalled $6 million, which included $2 million for premium pay in 2014. The hospital could have hired 31 full-time (with a minimum of 1,950 hours a year) or 51-part time (with a minimum of 1,170 hours a year) nurses with the overtime it paid in just two wards.

At another hospital we visited, one full-time Registered Nurse worked 4,040 overtime hours over a four-year period, earning approximately $247,000 in overtime pay alone. On average, this nurse had worked the equivalent hours of 1.5 full-time nurses continuously throughout the four-year period.

Although some nurses welcome the chance to work overtime, studies show that too much overtime leads to burnout and sick days. For example:

- At all three of the hospitals we visited, the emergency room and the intensive-care unit

Figure 14: Comparison of Employment, Compensation, Benefits and Working Hours for Different Types of Nurses
Prepared by the Auditor General of Ontario

	Employment Classification			
	Full Time	**Part Time**	**Casual**	**Agency**
Hospital employee?	Yes	Yes	Yes	No
Unionized[1]	Yes	Yes	Yes	No[2]
Maximum hourly rate (not including benefits):				
Registered Practical Nurse	$30	$30	$30	$52
Registered Nurse	$45	$45	$45	$65
Benefits including pension	Estimate 14%	14% in lieu of benefits	14% in lieu of benefits	Hourly rate includes benefits
Regular overtime pay	1.5 x hourly rate	1.5 x hourly rate	1.5 x hourly rate	None
Statutory holiday overtime pay	1.5 x hourly rate plus lieu day	1.5 x hourly rate	1.5 x hourly rate	None
Number of sick days[3]	Up to 15 continuous weeks, but no stated yearly limit	Not covered	Not covered	n/a
Number of work hours per year	Regular 1,950	Minimum 1,170	No minimum or maximum	No minimum or maximum

1. The majority of nurses working in Ontario hospitals are unionized. They work under collective agreements negotiated between their respective unions and the Ontario Hospital Association. The collective agreements set out, among other things, the minimum working-hour requirement, hourly rates and overtime rates.
2. Agency nurses are not union members and therefore are not covered by the same contracts as other nurses. Their rates are generally higher than union rates to compensate for lack of benefits. Agencies pay their nurses for the number of hours worked according to the hourly rates set by the agency or according to the agreement signed between the nursing agency and the hospital.
3. Covered by short-term sick leave plan under the Hospitals of Ontario Disability Income Plan.

were the two with the most nurse overtime—and with the highest number of nurse sick days.

- At one hospital, we found a full-time Registered Nurse who between 2011 and 2014 worked 2,180 hours of overtime—and took 125 sick days, an average of 31 sick days a year (the 2014 industry average for health-care workers including nurses was 11 sick days a year).

Nurses who work in Ontario can take short-term leave (or sick days) up to 15 continuous weeks, whereas nurses in most other provinces are entitled to 18 days per year. Although nurse sick days are covered by the Hospitals of Ontario Disability Income Plan, their absences still cost hospitals, either through overtime pay for other nurses to cover, or in nursing agency costs for a replacement.

We found that the number of nurse sick days is on the rise, with 8% of nursing staff at one hospital taking more than 20 sick days each in 2014/15, while another 10% took between 11 and 20 days.

The same year, 11% of nursing staff at another hospital took more than 20 sick days each, and another 7% took between 11 and 20 sick days each.

Two of the three hospitals we visited managed their workload by using agency nurses in addition to overtime and nursing pools. One of these hospitals indicated that it had difficulty recruiting critical-care nurses. The third hospital used only overtime.

We found that two of the three hospitals had done only limited analysis to inform their decisions on the costs and benefits of using agency nurses compared to other types of nursing staff. For example, full-time nurses could be paid overtime

or more part-time and casual nurses could be hired for each nursing unit. Although the third hospital has conducted cost-benefit analysis on the use of agency nurses, this hospital reported an increase of 335%, or $2.5 million, in its agency costs from 2011/12 to 2014/15. For the amount this hospital spent in 2015 on agency nurses for its emergency department, it could have hired four full-time or seven part-time emergency-room nurses.

At the same hospital, one Registered Practical Nurse from a nursing agency had worked more than 1,530 hours in 2015. This is considered excessive, because part-time nurses at this hospital are only required to work 1,170 hours a year.

Overreliance on agency nurses is a concern because, in addition to being costly, it creates a lack of continuity that may lead to inconsistencies in care delivered to patients.

4.6.3 Nurse Caseloads Are Heavier Than What Best Practices Recommend

Several jurisdictions, such as California, some states in Australia, and Japan, have mandated nurse-to-patient ratios that define minimum nurse staffing levels. Ontario currently does not have a mandated nurse-to-patient ratio, but research has established a best practice ratio of 1:4 (one nurse for every four patients) in medicine and surgery wards.

The *Journal of the American Medical Association* reports that every extra patient beyond four that is added to a nurse's workload results in a 7% increased risk of patient death.

We found that at the three large community hospitals we visited, nurse-to-patient ratios are as high as 1:6 during the day, and 1:7 during night shifts for medicine and surgery patients.

Our survey of large community hospitals also revealed that nurse-to-patient ratios for medicine wards is as high as 1:9 during overnight shifts. The majority of survey respondents attributed lower nurse-to-patient ratios to staff shortages caused by lack of funding.

We also noted a recent trend in hospitals hiring more Registered Practical Nurses (who earn lower hourly rates than Registered Nurses) because of funding constraints; 82% of the hospitals we surveyed acknowledged that their hospitals have found savings by modifying their ratios of Registered Nurses to Registered Practical Nurses.

According to the Registered Nurses' Association of Ontario, 2014 CIHI data shows that Ontario has the second lowest (after British Columbia) RNs per capita compared to other Canadian provinces. In 2014, Ontario had 71.4 RNs per 10,000 people, compared to 83.6 for the rest of Canada.

RECOMMENDATION 15

To ensure better use of hospital resources for nursing care in each ward, hospitals should:

- assess the need for implementing a more efficient scheduling system, such as a hospital-wide information system that centralizes the scheduling of all nurses based on patient needs; and
- more robustly track and analyze nurse overtime and sick leave, and conduct thorough cost/benefit studies to inform decision-making on the use of different types of nursing staff without overreliance on agency nurses to fill in shortages.

RESPONSE FROM HOSPITALS

We agree with the recommendation. Hospitals that have not already done so will conduct a cost-benefit analysis of the options for more robust centralized scheduling, including an electronic scheduling system. Hospitals will review current methods of reporting on overtime, sick time and agency use with the aim to strengthen reporting to support deciding on ways to reduce overtime and agency use, when and where applicable. An electronic staffing solution alone will not address this issue but rather is a tool to assist in tracking and monitoring for decision-making. Hospitals will review

their current nurse staffing model to ensure adequate resources are in place to minimize sick time and overtime, meet patient needs and be fiscally prudent, and will make adjustments where appropriate.

4.7 Protection of Patients and Their Personal Health Information Needs Improvement

4.7.1 Background Checks Not Consistently Done

One of the hospitals we visited did not perform criminal record checks before hiring new employees. The other two did, but did not periodically update checks for existing staff.

Hospitals in British Columbia require every individual who works with children or vulnerable adults to undergo a criminal record check before that individual is hired, and at least once every five years from then on. Currently, Ontario hospitals do not have a similar legal requirement.

4.7.2 Accounts Not Always Closed on Time

We found significant weaknesses in the protection of patients and their personal information on computer systems in all three large community hospitals we visited.

At one hospital, for example, we found 136 active computer accounts for people no longer employed there. At another, we found that it took more than 14 days to delete unneeded accounts in one-fifth of the 730 cases we reviewed. We also noted that this hospital's human resources department did not always promptly inform the IT department about staff changes.

At the third hospital, we found 22 employees had multiple computer accounts for no justifiable reason.

4.7.3 Unattended Computers Not Automatically Logged Off

The risk of unauthorized access to personal health data increases when computers are left logged in and unattended. The Information and Privacy Commissioner of Ontario recommends that, where appropriate, automatic system timeouts be put in place so that the hospital's electronic information system logs the user off or locks the computer screen after a short period of inactivity.

We noted that one hospital we visited reported and remediated an incident that highlighted this risk. In March 2016, an unauthorized external health service provider used an unattended computer to view patient information while the emergency-room nurse was away.

At another, none of the approximately 2,000 computers had an automatic logout function, and a key application containing personal health information was programmed to log out automatically only after 12 hours of inactivity.

4.7.4 Portable Devices Unencrypted

In 2007, after several incidents of lost and stolen USB keys and laptops containing thousands of personal health records, the Information and Privacy Commissioner of Ontario recommended that hospitals implement enterprise-wide encryption of portable electronic devices. Such encryption protects data stored on mobile computing devices by denying unauthorized viewing or access.

We found that one hospital we visited has no controls in place to prevent employees from using unencrypted USB keys. The same hospital also did not have a centralized system in place for tracking IT assets. Another hospital we visited had no process in place to manage USB keys.

RECOMMENDATION 16

To ensure the safety of patients and that their personal health information is safeguarded,

hospitals should have effective processes in place to:

- perform criminal record checks before hiring new employees, and periodically update checks for existing staff, especially those who work with children and vulnerable patients;
- deactivate access to all hospital information systems for anyone no longer employed by the hospital;
- where appropriate, implement adequate automatic logout functions for computers and any information systems containing patient information; and
- encrypt all portable devices, such as laptops and USB keys, used by hospital staff to access patient information.

RESPONSE FROM HOSPITALS

We agree with the recommendation. Hospitals will review and improve their practices around deactivation of terminated employees, automatic log-offs and encrypted portal devices. The hospitals will engage the Ontario Hospital Association to develop a province-wide hospital standard for criminal reference checks and will ensure practices are in compliance with this standard.

4.8 Patients at Risk from Poorly Maintained Medical Equipment

In all three of the large community hospitals we visited, we found that preventative maintenance on large equipment such as Magnetic Resonance Imaging (MRI) and Computed Tomography (CT) scanners was regularly performed by external vendors. However, for smaller medical equipment (such as ventilators) that are typically maintained in-house, none of the hospitals we visited kept accurate and complete preventive maintenance schedules for their medical equipment, increasing the risk that some vital equipment was not being maintained as required.

4.8.1 Preventive Maintenance Lists Inaccurate

At one hospital, only 83% of all medical equipment was part of the preventive maintenance program. We also noted that the hospital's preventative maintenance database was outdated because it included about 310 items of medical equipment that had already been retired.

At another hospital, decommissioned equipment was not taken out of the hospital's scheduled maintenance list, resulting in technicians wasting time searching for equipment that did not exist.

At the third hospital, about 35% of all medical equipment was not included in the preventive maintenance schedule, including high-risk equipment such as anesthesia units, ventilators and aspirators.

4.8.2 Preventive Maintenance Conducted Sporadically

The Emergency Care Research Institute categorizes some hospital equipment as "high risk" if its failure or misuse is reasonably likely to seriously injure patients or staff. For example, life-support, resuscitation and critical-monitoring devices are all considered high risk.

The Joint Commission on Accreditation of Healthcare Organizations, which accredits and certifies over 20,000 health care organizations and programs in the United States, recommends that hospitals prioritize maintenance of high-risk equipment and take measures to ensure maintenance is not skipped or deferred.

We found that some high-risk medical equipment was not being regularly serviced according to service manuals or hospital policy:

- At one hospital, 20% of medical equipment was not being maintained according to schedule, and some maintenance was two years past due. This included high-risk devices such as ventilators, anesthesia units and defibrillators used in the emergency room, intensive-care units and operating rooms.

- At another hospital, we reviewed all scheduled maintenance and found that only 53% of equipment was being maintained according to schedule, 30% received maintenance late, and 17% did not receive maintenance at all.
- At the third hospital, the number of patient incidents involving medical devices tripled between 2011 and 2015. The hospital attributed this to a change in its policy on reporting patient incidents. We also noted that some of the high-risk devices involved in patient incidents were not included in the hospital's preventive maintenance database.

At all three of the hospitals we visited, we noted that scheduled preventive maintenance was missed mainly for the following reasons: maintenance schedules were incomplete and inaccurate; there was insufficient maintenance staff to perform all the necessary work; and there was a lack of performance-monitoring for preventive maintenance staff.

RECOMMENDATION 17

To ensure medical equipment functions properly when needed, and that both patients and health-care workers are safe when equipment is in use, hospitals should:

- maintain a complete inventory of medical equipment, with accurate and up-to-date information on all equipment that requires ongoing preventive maintenance;
- perform preventive and functional maintenance according to manufacturers' or other established specifications, and monitor maintenance work to ensure that it is being completed properly and on a timely basis; and
- monitor the performance of preventive maintenance staff to ensure equipment is being maintained in accordance with appropriate scheduling.

RESPONSE FROM HOSPITALS

We agree with the recommendation. Hospitals will ensure that the databases for recording preventive maintenance activities are accurate and that preventive maintenance activities, including the performance of preventive maintenance staff, are monitored to ensure they are completed on a timely basis.

Appendix 1: Ontario Public Hospitals, by Type, Local Health Integration Network (LHIN) and Funding, 2015/16

Source of data: Ministry of Health and Long-Term Care

	Hospital	Hospital Type	LHIN	Funding ($ million)
1	Trillium Health Partners	Large community	Mississauga Halton	714
2	William Osler Health System	Large community	Central West	489
3	Niagara Health System	Large community	Hamilton Niagara Haldimand Brant	385
4	Lakeridge Health	Large community	Central East	335
5	Windsor Regional Hospital	Large community	Erie St. Clair	320
6	Humber River Regional Hospital	Large community	Central	307
7	Southlake Regional Health Centre	Large community	Central	294
8	Rouge Valley Health Systems	Large community	Central East	269
9	Scarborough Hospital	Large community	Central East	259
10	North York General Hospital	Large community	Central	248
11	Halton Healthcare Services Corp	Large community	Mississauga Halton	244
12	Peterborough Regional Health Centre	Large community	Central East	219
13	Grand River Hospital	Large community	Waterloo Wellington	215
14	Royal Victoria Regional Health Centre	Large community	North Simcoe Muskoka	211
15	St. Joseph's Health Centre (Toronto)	Large community	Toronto Central	199
16	Toronto East General Hospital	Large community	Toronto Central	192
17	North Bay Regional Health Centre	Large community	North East	183
18	Mackenzie Health	Large community	Central	179
19	Markham Stouffville Hospital	Large community	Central	162
20	Queensway Carleton Hospital	Large community	Champlain	149
21	Quinte Healthcare Corp	Large community	South East	139
22	Bluewater Health	Large community	Erie St. Clair	131
23	Sault Area Hospital	Large community	North East	131
24	Grey Bruce Health Services	Large community	South West	128
25	Brant Community Healthcare System	Large community	Hamilton Niagara Haldimand Brant	121
26	St. Mary's General Hospital	Large community	Waterloo Wellington	121
27	Joseph Brant Hospital	Large community	Hamilton Niagara Haldimand Brant	117
28	Guelph General Hospital	Large community	Waterloo Wellington	106
29	Orillia Soldiers' Memorial Hospital	Large community	North Simcoe Muskoka	92
30	Cambridge Memorial Hospital	Large community	Waterloo Wellington	89
31	Cornwall Community Hospital	Large community	Champlain	78
32	Woodstock General Hospital Trust	Large community	South West	71
33	St. Thomas-Elgin General Hospital	Large community	South West	67

	Hospital	Hospital Type	LHIN	Funding ($ million)
34	Stratford General Hospital	Large community	South West	67
35	Timmins and District Hospital	Large community	North East	65
36	Ross Memorial Hospital	Large community	Central East	65
37	Public General Hospital Society of Chatham	Large community	Erie St. Clair	62
38	Pembroke Regional Hospital Inc	Large community	Champlain	54
39	Muskoka Algonquin Healthcare	Large community	North Simcoe Muskoka	51
40	Brockville General Hospital	Large community	South East	50
41	Georgian Bay General Hospital	Large community	North Simcoe Muskoka	45
42	Headwaters Health Care Centre	Large community	Central West	45
43	Northumberland Hills Hospital	Large community	Central East	42
44	Perth and Smiths Falls District Hospital	Large community	South East	40
45	Collingwood General and Marine Hospital	Large community	North Simcoe Muskoka	36
46	Norfolk General Hospital	Large community	Hamilton Niagara Haldimand Brant	35
47	West Parry Sound Health Centre	Large community	North East	33
48	Leamington District Memorial Hospital	Large community	Erie St. Clair	29
49	Strathroy Middlesex General	Large community	South West	29
50	St. Joseph's Health Services Association of Chatham Inc	Large community	Erie St. Clair	28
51	Lake of the Woods District Hospital	Large community	North West	27
52	Winchester District Memorial Hospital	Large community	Champlain	27
53	Hôpital Général de Hawkesbury and District General Hospital Inc	Large community	Champlain	21
54	Stevenson Memorial Hospital	Large community	Central	20
55	St. Joseph's General Hospital	Large community	North East	19
56	Temiskaming Hospital	Large community	North East	19
57	Sydenham District Hospital	Large community	Erie St. Clair	18
58	Women's College Hospital	Small	Toronto Central	73
59	Holland Bloorview Kids Rehabilitation Hospital	Small	Toronto Central	47
60	Sioux Lookout Meno-Ya-Win Health Centre	Small	North West	31
61	South Bruce Grey Health Centre	Small	South West	31
62	Weeneebayko Area Health Authority	Small	North East	27
63	Riverside Health Care Facilities Inc	Small	North West	26
64	Renfrew Victoria Hospital	Small	Champlain	24
65	Lennox and Addington County General Hospital	Small	South East	22
66	Tillsonburg District Memorial Hospital	Small	South West	21
67	Dryden Regional Health Centre	Small	North West	20
68	Kemptville District Hospital	Small	Champlain	20
69	Kirkland and District Hospital	Small	North East	20
70	Groves Memorial Community Hospital	Small	Waterloo Wellington	17
71	Alexandra Marine And General Hospital	Small	South West	17

	Hospital	Hospital Type	LHIN	Funding ($ million)
72	Manitoulin Health Centre	Small	North East	16
73	North Wellington Health Care Corp	Small	Waterloo Wellington	16
74	Sensenbrenner Hospital	Small	North East	16
75	Arnprior Regional Health	Small	Champlain	16
76	West Nipissing General Hospital	Small	North East	15
77	Listowel Memorial Hospital	Small	South West	14
78	Campbellford Memorial Hospital	Small	Central East	14
79	Hanover and District Hospital	Small	South West	14
80	Hôpital Notre-Dame Hospital (Hearst)	Small	North East	13
81	Alexandra Hospital	Small	South West	13
82	Blind River District Health Centre/Pavillon Santé du District de Blind River	Small	North East	13
83	Haldimand War Memorial Hospital	Small	Hamilton Niagara Haldimand Brant	12
84	Espanola General Hospital	Small	North East	12
85	Almonte General Hospital	Small	Champlain	12
86	Wingham and District Hospital	Small	South West	12
87	North of Superior Healthcare Group[1]	Small	North West	12
88	West Haldimand General	Small	Hamilton Niagara Haldimand Brant	11
89	Clinton Public Hospital	Small	South West	11
90	Glengarry Memorial Hospital	Small	Champlain	10
91	Lady Minto Hospital at Cochrane	Small	North East	10
92	Carleton Place District Memorial Hospital	Small	Champlain	10
93	Haliburton Highlands Health Services Corporation	Small	Central East	10
94	Geraldton District Hospital	Small	North West	10
95	Four Counties Health Services	Small	South West	9
96	St. Francis Memorial Hospital	Small	Champlain	8
97	Anson General Hospital	Small	North East	8
98	St. Marys Memorial Hospital	Small	South West	8
99	Atikokan General Hospital	Small	North West	7
100	Services de Santé de Chapleau Health Services	Small	North East	7
101	South Huron Hospital	Small	South West	7
102	Lady Dunn Health Centre	Small	North East	7
103	Seaforth Community Hospital	Small	South West	7
104	Deep River and District Hospital	Small	Champlain	7
105	Nipigon District Memorial Hospital	Small	North West	7
106	Red Lake Margaret Cochenour Memorial Hospital Corp.	Small	North West	6
107	Englehart and District Hospital Inc	Small	North East	6
108	Mattawa General Hospital	Small	North East	6
109	Bingham Memorial Hospital	Small	North East	6
110	Smooth Rock Falls Hospital	Small	North East	6
111	Manitouwadge General Hospital	Small	North West	5

	Hospital	Hospital Type	LHIN	Funding ($ million)
112	Casey House Hospice	Small	Toronto Central	5
113	Hornepayne Community Hospital	Small	North East	4
114	University Health Network	Teaching	Toronto Central	991
115	Hamilton Health Sciences Corp	Teaching	Hamilton Niagara Haldimand Brant	834
116	London Health Sciences Centre	Teaching	South West	748
117	Ottawa Hospital	Teaching	Champlain	693
118	Sunnybrook Health Sciences Centre	Teaching	Toronto Central	599
119	Hospital for Sick Children	Teaching (specialty children)	Toronto Central	448
120	St. Michael's Hospital	Teaching	Toronto Central	436
121	St. Joseph's Healthcare Hamilton	Teaching	Hamilton Niagara Haldimand Brant	402
122	Sinai Health System	Teaching	Toronto Central	366
123	Health Sciences North	Teaching	North East	295
124	Kingston General Hospital	Teaching	South East	282
125	St. Joseph's Health Care London	Teaching	South West	269
126	Thunder Bay Regional Health Sciences Centre	Teaching	North West	205
127	Children's Hospital of Eastern Ontario	Teaching (specialty children)	Champlain	145
128	Montfort Hospital	Teaching	Champlain	142
129	University of Ottawa Heart Institute	Teaching	Champlain	130
130	Religious Hospitallers of St. Joseph of the Hôtel Dieu of Kingston	Teaching	South East	52
131	Bruyère Continuing Care Inc	Chronic/rehab	Champlain	93
132	St. Joseph's Care Group Corp	Chronic/rehab	North West	91
133	Hôtel-Dieu Grace Hospital-Windsor	Chronic/rehab	Erie St. Clair	72
134	Providence Care Centre	Chronic/rehab	South East	71
135	West Park Healthcare Centre	Chronic/rehab	Toronto Central	64
136	Providence Health Care	Chronic/rehab	Toronto Central	58
137	Baycrest Centre for Geriatric Care	Chronic/rehab	Toronto Central	58
138	Runnymede Healthcare Centre	Chronic/rehab	Toronto Central	37
139	Religious Hospitallers of St. Joseph of the Hôtel Dieu of St. Catharines	Chronic/rehab	Hamilton Niagara Haldimand Brant	27
140	St. Joseph's Health Centre (Guelph)	Chronic/rehab	Waterloo Wellington	18
141	Salvation Army Grace Hospital	Chronic/rehab	Toronto Central	18
142	St. Joseph's Continuing Care Centre of Sudbury	Chronic/rehab	North East	11
143	Religious Hospitallers of St. Joseph of Cornwall	Chronic/rehab	Champlain	8
144	Centre for Addiction and Mental Health	Specialty psychiatric	Toronto Central	261
145	Waypoint Centre for Mental Health Care	Specialty psychiatric	North Simcoe Muskoka	121
146	Ontario Shores Centre for Mental Health Sciences	Specialty psychiatric	Central East	118
147	Royal Ottawa Health Care Group	Specialty psychiatric	Champlain	102
Total Funding				**16,973**

1. Wilson Memorial General Hospital and McCausland Hospital amalgamated to form North of Superior Healthcare Group on April 1, 2016.

Appendix 2: Best Practices in Selected Areas of Hospital Operations

Prepared by the Office of the Auditor General of Ontario

Area of Hospital Operation	Best Practice
Occupancy rate	Numerous clinical research studies[1,2,3,4] show that an occupancy rate higher than 85% resulted in longer wait times for hospital beds in acute-care wards and an increased risk of hospital-acquired infections, such as bloodstream infections, that may cause sepsis.
Alternate-level-of-care patients waiting for long-term-care home placements	Other Canadian provinces including British Columbia, Manitoba, Newfoundland and Labrador, Nova Scotia and Prince Edward Island require patients to go to the first vacant bed anywhere in the province. Saskatchewan and New Brunswick require patients to go to any available long-term-care home bed within the same region.
Bed-wait time	The Canadian Association of Emergency Physicians recommends that the median wait time at intensive care units and other acute-care wards should not exceed two hours and that 90% of patients should be transferred to a hospital bed within eight hours.
Bed management	Some hospitals use an integrated bed management IT system that offers real-time bed availability and bed demand information.
Patient admissions and discharges	Kaiser Permanente hospitals[5] engage in the following activities: • divert patients to out-patient clinic programs and services as much as possible; • ensure patients stay in the hospital only as long as is medically appropriate; and • smooth out the volume of patient admissions and discharges throughout the day and throughout the week with advance discharge planning
Scheduling of operating rooms	Kaiser Permanente hospitals[5] have a dedicated operating room for emergency surgeries. In addition, for ease of bed planning, these hospitals also schedule the same type of elective surgery to be performed on the same day (e.g., all orthopedic surgeries on Tuesday). Since the same types of surgery usually have the same expected length of hospital stay, most of these patients could be discharged on the same day for better bed management.
Reporting on elective surgery wait time	Other jurisdictions, such as Nova Scotia and the United Kingdom, report wait time from the day the patient is referred by the family doctor to the day the patient receives the elective surgery.
Criminal background checks	Hospitals in British Columbia require every individual who works with children or vulnerable adults to undergo a criminal record check before being hired and at least once every five years from then on.
Scheduling of nursing staff	Kaiser Permanente hospitals[5] use a centralized hospital-wide scheduling system to schedule nursing shifts. They also employ mostly part-time, rather than full-time, nurses to improve flexibility of the workforce. Data on overtime, use of agency nurses and sick time are also collected in a centralized system to facilitate data analysis.

1. *The BMJ* (formerly *British Medical Journal*), "Dynamics of bed use in accommodating emergency admissions: stochastic simulation model" (July 1999).
2. *The BMJ* (formerly *British Medical Journal*), "Bed utilisation and increased risk of Clostridium difficile infections in acute hospitals in England in 2013/2014" (September 2016).
3. Department of Health and Children, Republic of Ireland, "Acute Hospital Bed Capacity, A National Review" (2002), p. 54.
4. European Society of Clinical Infectious Diseases, "Bed occupancy rates and hospital-acquired infections--should beds be kept empty?" (June 2012).
5. Kaiser Permanente is one of the leading health-care providers and not-for-profit health plans in the United States. It manages 38 hospitals, more than 600 medical officers and other out-patient facilities. It also offers educational programs on its leading best practices in health care and in system integration across its health plan, hospitals and physician groups.

Appendix 3: Relevant Recommendations Reported Previously and Their Current Status

Prepared by the Office of the Auditor General of Ontario

Relevant Recommendation Reported Previously	Current Status as Detailed in This Report*
3.08 Long-Term-Care Home Placement Process (2012)	
Recommendation 2 To help clients move out of hospital more quickly and to help manage growing wait lists, the Ministry of Health and Long-Term Care (Ministry) should consider options employed by other jurisdictions, as well as making more community alternatives to long-term-care (LTC) homes available and having LTC homes provide more restorative and transitional care programs to improve, among other things, clients' functioning....	4.4.1 Bed Shortages Caused by Patients Waiting in Hospital for Other Types of Care
3.02 Discharge of Hospital Patients (2010)	
Recommendation 5 To help reduce the time admitted hospital patients wait for a bed: • hospitals should review the times and days of the week patients are admitted and discharged, and arrange patient discharges to allow sufficient time for beds to be prepared in advance for new admissions, especially for patients arriving at known peak admission times; and • larger hospitals should assess the costs and benefits of implementing a bed management system that provides "live" information on the status of hospital beds....	4.4.3 Poorly Scheduled Admissions and Discharges Cause Longer Bed-Wait Times 4.4.2 Hospitals Lack Efficient Systems for Allocating Beds
3.05 Hospital Emergency Departments (2010)	
Recommendation 5 To ensure that vacant in-patient beds are identified, cleaned, and made available on a timely basis to admitted patients waiting in emergency departments: • hospitals should have an effective process in place to identify vacant beds and communicate their availability between in-patient units and emergency departments....	4.4.2 Hospitals Lack Efficient Systems for Allocating Beds
3.09 Hospitals—Management and Use of Surgical Facilities (2007)	
Recommendation 4 To better ensure the equitable and timely treatment of patients requiring urgent surgery, hospitals should:... • review whether urgent patients are being prioritized by all surgeons in accordance with hospital policy, as well as whether these patients are receiving surgery within the established time frames, and take corrective action where necessary; and • review the costs and benefits of dedicating operating room time each day for urgent surgical cases as part of their regular planned activity....	4.3.1 Patients Waiting Too Long for Emergency Surgeries
Recommendation 6 To enable both patients and health-care providers to make informed decisions and to help ensure that patients receive the surgery that meets their needs within an appropriate length of time ... the Ministry of Health and Long-Term Care should ... reconsider its decision not to report wait times by surgeon or, as a minimum, make this information available to referring physicians.	4.3.2 Patients Waiting Too Long for Some Urgent Elective Surgeries
3.05 Hospitals—Administration of Medical Equipment (2006)	
Recommendation 6 To ensure that medical equipment operates properly, hospitals should: • perform preventive and functional maintenance according to manufacturer's or other established specifications and monitor such maintenance to ensure that it is being completed....	4.7.2 Preventive Maintenance Conducted Sporadically
Recommendation 7 To assist in better managing medical equipment needs and identifying equipment for maintenance, hospitals should ensure that medical equipment inventory listings contain complete and up-to-date information on the acquisition, maintenance, and disposal of medical equipment.	4.7.1 Preventive Maintenance Lists Inaccurate

* Refer to the listed sections for details.

Chapter 3
Section
3.09

Metrolinx—Public Transit Construction Contract Awarding and Oversight

1.0 Summary

Metrolinx is an agency of the Ministry of Transportation responsible for operating a network of train and bus routes across more than 11,000 square kilometres (km) in the Greater Toronto and Hamilton Area. Currently valued at $11 billion, Metrolinx uses about 680 km of railway track on seven train lines, 66 train stations and 15 bus terminals. In total, about 69 million passenger boardings occur annually on Metrolinx vehicles.

Metrolinx was established in 2006 as a planning agency, and then merged in 2009 with GO Transit (GO), which had been operating the regional transit system since 1967. With this merger, Metrolinx became responsible for operating, maintaining and expanding GO's network of trains and buses. Expanding public transit capacity is a high priority for Metrolinx: under the government's 25-year "Big Move" plan, announced in 2008, about $27 billion is earmarked for new public transit infrastructure over the next 10 years.

In the past five years, Metrolinx has completed about 520 construction projects costing a total of about $4.1 billion. The average cost of these projects was about $8 million. These projects included building new parking lots, expanding GO railway tracks, building tunnels and bridges for trains, and upgrading existing GO stations.

Metrolinx's construction projects proceed differently depending on the contractor Metrolinx works with. Of the $4.1 billion Metrolinx spent over the past five years, about $3.4 billion (82%) was on projects where Metrolinx contracted out all of the work. That is, external firms designed the project, constructed it and oversaw it. For almost all of these projects, Metrolinx contracted with a separate company to design the project and a different company to construct it (this is the traditional model for delivery of construction projects).

The other $725 million (18%) of construction dollars Metrolinx spent in the past five years was paid to Canada's two major railway companies—the Canadian National Railway (CN) and the Canadian Pacific Railway (CP). When GO was first established, it used existing CN and CP track. As demand for GO train service increased, GO bought as much CN and CP track and surrounding land that it could. When CN and CP would not sell land to GO, GO paid them to construct more track lines on their land and paid them, as per the terms of their agreement, to use the lines. This continued after Metrolinx assumed responsibility for GO. Thus, Metrolinx has had to hire either CN or CP as the sole contractor for these projects on CN and CP land.

Our audit found that Metrolinx does not have adequate processes in place to consistently ensure value for money in its delivery of construction projects. Because of deficiencies noted in its oversight processes around construction contracts, and because of deficiencies we confirmed in a sample of contracts, there is a risk that it is spending more than what is required, and there remains a significant risk that this will continue to happen.

Metrolinx continues to award contracts to poorly performing contractors that submit the lowest bids—it does not track contractors' past performance and does not consider contractors' ability to deliver completed projects on time, which has resulted in Metrolinx incurring additional costs. Metrolinx has had many years to implement a contractor performance-management system but still has not done so.

For contracts with CN and CP, Metrolinx does not do work to know that it is getting what it pays for: it does not verify charged costs; it does not ensure that charged costs are reasonable; when it requests that the parts on a project be new, and pays the cost of new parts (as opposed to less expensive recycled ones), it does not require that parts be checked to ensure that they are new. It has also been paying excessively high mark-up rates charged by CN for building new rails for Metrolinx (CN's mark-up rates are specified on its invoices, while CP's are not as clear).

Our specific observations are as follows:

Metrolinx Rarely Holds Design Consultants and Construction Contractors Accountable When They Deliver Work That Is of Poor Quality and/or Late—and It Continues to Award Them More Work

- **Design consultants' errors and delays result in additional costs to Metrolinx, yet Metrolinx takes little action to recover costs and prevent this from reoccurring.** Metrolinx allows design consultants to produce designs that are not feasible to construct, contain errors, misestimate the quantity of materials required, or omit specifications—all with no repercussions. Because designs created by consultants are used by the contractor to calculate bid prices, they need to be free of error; otherwise, there can be considerable cost overruns during construction. Also, since construction cannot begin until the design is finalized, design delays can significantly impact the overall project time frame and cost. In our review of a sample of Metrolinx project documents from the past five years, we noted that consultants made frequent errors in their designs. In one project alone, errors made by the consultant caused a project to be over budget by 35%, or $13.6 million, a cost that Metrolinx had to pay as a result of the design not including all final requirements. In a sample of six projects whose total initial construction costs were over $178 million, $22.5 million *more* had to be spent just because of the design consultants' errors and omissions. There were no repercussions in these cases, and Metrolinx did not factor in this poor performance when selecting these design consultants for future projects.
- **With the exception of two contractors, Metrolinx does not appear to be addressing problems caused by construction contractors that have a history of poor performance on Metrolinx projects.** A contractor might repeatedly be late in delivering work, not construct the project according to the approved design, not follow safety regulations and/or not fix deficiencies on time—yet Metrolinx will hire the contractor for future projects, provided it is the lowest bidder. Only in the cases of two contractors did Metrolinx take past unacceptable performance into consideration. For example:
  - **One contractor was awarded 22 more projects after performing poorly for Metrolinx.** We noted that Metrolinx issued a letter of default to a contractor in 2009 because construction workers had not even

shown up on the project site for several weeks. Despite this, since then, Metrolinx has awarded this contractor 22 more projects worth a total of $90 million. We reviewed the contractors' performance on a few of these 22 projects and noted that project staff continued to rate its performance as poor. For example, on a project in 2012, this contractor installed several pieces of substituted equipment and building materials that were not approved in the contract (the substitutions were caught by Metrolinx only after-the-fact). On another project in 2013, this contractor took six months, after it had already completed the project, to fix its deficiencies—one significant deficiency was the absence of a functioning camera and surveillance system that posed a safety risk to commuters using the station.

- **Metrolinx terminated a contract with another poorly performing contractor, paid it almost the full amount, and then re-hired it for another contract.** Metrolinx hired the same contractor for Phase 2 of a project to install external cladding (cover) for a pedestrian bridge over Highway 401 even though the contractor had performed extremely poorly on Phase 1. The contractor again had performance issues on Phase 2: it significantly damaged glass covering the bridge, and Metrolinx estimates it will cost $1 million to replace the glass. Metrolinx terminated the contract with the contractor because of performance issues, even though the construction had not been completed, and paid the contractor almost the full $8 million of its contract. We noted that, after performing poorly on both Phase 1 and Phase 2, Metrolinx still awarded this contractor another major project valued at $39 million (to build a new platform at a GO station).
- **Late construction projects have resulted in additional costs, yet Metrolinx rarely takes action against contractors for not delivering on time.** Even though Metrolinx incurs significant costs because of contractors completing projects late (anywhere from four months to 25 months), it seldom takes action against contractors that do not deliver on schedule. For example, on one project alone, Metrolinx paid consultants over $350,000—or 160%—more than budgeted to oversee this project because the contractor was 25 months late in completing the project. In a sample of eight projects whose total initial budget for oversight services was $1.35 million, over $2 million *more* had to be spent because of how late contractors were in completing their projects. That is 150% more than the initial oversight budget total. Although Metrolinx could charge contractors "liquidated damages"—a pre-determined amount included in contracts to cover additional oversight costs if a project is late—it has not always included them in its contracts to allow it to charge liquidated damages. As well, based on information provided to us by Metrolinx, Metrolinx has rarely sought action against contractors for the recovery of additional costs.
- **Metrolinx does not take action against contractors that breach safety regulations during construction.** Metrolinx rarely takes into account whether contractors breached safety regulations that resulted in unsafe site and working conditions when awarding future contracts. We found that even when a contractor has caused safety issues to the public as well as construction workers, Metrolinx has taken no action against it, and has continued to award it future contracts. We noted that in *all* of Metrolinx's audits of compliance with safety regulations at construction sites over the past three years, contractors breached regulations. Instances were found

where contractors frequently erected unsafe scaffolds, or improperly labelled and stored flammable materials. Metrolinx informed us that the contractor, upon Metrolinx's request, had stopped the unsafe behaviour right away; however, we noted that there were no follow-up audits to determine whether the contractor continued to breach safety regulations, nor any repercussions for the contractor for its unsafe actions.

- **Metrolinx is not diligent in ensuring that contractors fix deficiencies in their work in a timely manner.** In three-quarters of the projects we reviewed, we noted that contractors took much longer than the industry standard of two months to fix all deficiencies. On average, these contractors took almost eight months to fix outstanding deficiencies.
- **Metrolinx has not addressed the risk of poorly performing sub-trades being selected by the contractor.** Metrolinx allows contractors to subcontract up to 100% of the work on their projects. Metrolinx has experienced significant issues with sub-trades—to the extent that its staff have requested that Metrolinx pre-screen sub-trades to ensure that those with a poor work history do not jeopardize project timelines.

Metrolinx's Accounting System Allows Payments to Exceed Projects' Approved Budgets

- **Metrolinx does not have, in its enterprise management system, a control in place to ensure that payments exceeding approved budgets have been approved for over-expenditure.** As a result, project staff must manually keep track of project expenditures to ensure that they are within the budget. However, we found that they are not always properly doing this. In one instance, in March 2013, Metrolinx issued a contractor two payments totalling $1.2 million over the project's approved $17 million budget without having authorization to exceed the budget. Three years later, on the same project, the same problem occurred again: Metrolinx made three payments totalling $3.2 million over the approved budget without prior authorization.

Metrolinx Has Not Managed Its Relationship with CN and CP in a Way that Ensures Value-for-Money for Ontarians

- **Metrolinx pays CN and CP without verifying most costs.** Metrolinx's projects with CN and CP are costed in one of two ways. With some CN projects, CN provides an estimate of the total costs, and that estimate becomes the lump-sum amount Metrolinx ultimately must pay for the project. With other CN projects and almost all CP projects, CN or CP invoices Metrolinx based on the project's time and materials. In all cases, Metrolinx pays CN and CP without verifying most costs:
  - We found that Metrolinx does not do sufficient work to determine if the estimated lump-sum costs on CN projects are reasonable. We also noted instances where Metrolinx paid for costs unrelated to its projects, such as costs for maintaining CN railway track.
  - We similarly found that Metrolinx does not verify whether invoices billed by CN and CP actually relate to work done on Metrolinx projects. For example, we found several CN charges to Metrolinx for work CN had done on track that it owned that GO Trains never use. Metrolinx does not have a site inspector at CN or CP to ensure work done by the railways, and, although it has the ability to audit invoices under its agreement with CN, it does not do so.
  - Compared to other rail companies that work for Metrolinx, CN charged Metrolinx significantly higher materials and labour costs. Specifically, materials costs were about 60% higher and labour costs were

130% higher. Information on CP's costs were not detailed enough to allow us to perform the same comparison.

- **CN Railway installed recycled parts; Metrolinx paid for new.** Metrolinx informed us that it may sometimes visually inspect railways once they are built, but inspections are not mandatory, and the results of any inspections that are done are not documented. We noted one instance where recycled parts were being used when only new parts were purchased. Without inspecting the parts used in railway construction, Metrolinx cannot know if it pays for new parts but receives recycled parts instead.
- **Metrolinx pays CN and CP excessive mark-up rates on projects.** All contracts with CN and CP are sole-sourced. CN's mark-up rates on labour and parts are set in a long-term agreement with Metrolinx. These rates are as much as 74% higher than industry benchmarks. Metrolinx has not negotiated any mark-up rates with CP, and they are usually not transparent. We found that CP disclosed their mark-up rates in only one of the projects we sampled, and they were about 30% higher than industry benchmarks.

This report contains 17 recommendations with 38 action items.

OVERALL METROLINX RESPONSE

Metrolinx welcomes the recommendations made by the Auditor General to improve construction procurement and contract management processes. Over the period reviewed by the Auditor General's Office, Metrolinx's annual capital investments, including construction costs, more than doubled. Metrolinx has taken many measures over this period to continue to improve its controls over this program, some of which are outlined below. The observations, insights and recommendations presented in the Auditor General's report will continue to support our ongoing efforts and commitment to continuous improvement in achieving our mandate of an integrated regional transportation network.

Significant work is underway to ensure that Metrolinx will be "best in class" as it relates to contract and construction management to ensure that we continue to provide value-for-money in our procurement and construction activities. Metrolinx will enhance its current implementation plan to include the recommendations made by the Auditor General. Current activities underway include:

- Metrolinx will continue to implement its enhanced Vendor Performance Management System. This "best practice" system will ensure that we optimize value-for-money by incentivizing good contractor performance and considering past contractor performance in awarding future work.
- Metrolinx continues to implement and adopt stronger contractual terms through the continued use of the Canadian Construction Documents Committee common contractual terms, stronger terms around project safety, the ability to use Metrolinx projects as references, and adoption of rights of exclusion (for example, rights not to award based on poor performance) in Metrolinx contracts.
- Metrolinx is in the process of transforming its Procurement division to strengthen its overall procurement process and vendor performance management system.
- Metrolinx is proactively implementing the Certificate of Recognition (COR) program as a mandatory requirement on all construction procurements. COR is a leading industry safety standard that ensures the contractor has in place a comprehensive health and safety management system.

In 2014, Metrolinx merged with the GO Transit Capital Infrastructure team and Metrolinx's Rapid Transit Implementation team to bring together expertise in project delivery,

program management and quality assurance. The new Capital Projects Group (CPG) is working to implement a best-in-class organization able to deliver on some of the region's most significant transit projects. CPG is currently working to share lessons learned and best practices from its Rapid Transit initiatives and infuse them into its active projects, including the Regional Express Rail program, ensuring consistency when dealing with capital projects. The updated processes being implemented will guide daily operations across CPG.

2.0 Background

2.1 Overview of Provincial Transportation Infrastructure

The province's transportation infrastructure is made up of road infrastructure and public-transit infrastructure, both falling under the responsibility of the Ministry of Transportation (Ministry). (The Ministry is not responsible for the road and public-transit infrastructure of municipalities.)

Ontario's **road infrastructure** is currently valued at $82 billion. It consists of about 40,000 km of highway lanes covering a distance of about 20,000 km, and almost 5,000 bridges and culverts.

Ontario's **public transit infrastructure** is currently valued at $11 billion. Operated by Metrolinx, which is an agency of the Ministry, it consists of a network of train and bus routes serving an area of more than 11,000 square kilometres in the Greater Toronto and Hamilton Area (GTHA). Metrolinx vehicles have about 69 million passenger boardings annually. Metrolinx operates trains on about 680 km of railway track on seven train lines. Trains and buses connect cities through 66 train stations and 15 bus terminals spanning from Hamilton in the west, Barrie in the north, Oshawa in the east and Lake Ontario in the south. In addition, there are about 70,000 parking spots in 10 multi-level parking garages and 139 surface parking lots. Throughout the entire network, there are about 470 bridges for pedestrians and trains.

Metrolinx was established in 2006 as an agency of the Ministry of Transportation (*Metrolinx Act, 2006*). Its mandate was that of a planning agency—to provide leadership in integrating various transit systems within the Greater Toronto and Hamilton Area. In 2009, Metrolinx's mandate expanded when the government of the day merged it with GO Transit (GO). GO had been operating the regional transit system since 1967. Before the merger, Metrolinx did not undertake any construction work itself. After the merger, in addition to its planning responsibilities, Metrolinx became responsible for operating, maintaining and expanding GO's network of trains and buses. It also absorbed GO's construction function, keeping all policies, contracts and procedures intact.

2.1.1 Major Construction Work Planned to Expand Province's Transportation Network

In 2008, the government announced its 25-year Regional Transportation Plan (also known as the "Big Move" plan) to make huge upgrades to Ontario's existing transportation infrastructure. The government identified that traffic congestion alone costs $11 billion annually, and that Ontario's population will grow by about 40% in the next 25 years.

The Big Move plan set the stage for the single biggest wave of investment to build new transportation infrastructure since the time these systems were initially built. A sizeable investment is being made to upgrade regional public transit to help with traffic congestion. For example, train frequency on each line travelling to and from downtown Toronto is expected to increase to every 15 minutes in the daytime on weekdays. Outside the downtown core, light rail transit is being built in Toronto, Mississauga and Brampton.

Significantly more money is allocated for expansion over the next 10 years than in previous years.

Figure 1: Planned Spending to Rehabilitate and Expand Ontario's Transportation Infrastructure, 2016/17–2025/26

Source of data: Ministry of Transportation and Metrolinx

Type of Infrastructure	Planned Spending to Rehabilitate Existing Infrastructure ($ billion)	Planned Spending to Build New Infrastructure ($ billion)	Total ($ billion)
Highways and bridges	14	4	18
Public transit	3	27	30
Total	**17**	**31**	**48**

As **Figure 1** indicates, the Ministry expects that building new highways, bridges and public transit infrastructure will cost about $27 billion over the next 10 years.

2.2 Public Transit Construction Projects

In the past five years, Metrolinx has completed about 520 construction projects totalling about $4.1 billion. These include building new parking lots, expanding GO railway tracks, building tunnels and bridges for trains, and upgrading existing GO stations. Some of these projects were also part of the Big Move plan. These projects cost an average of about $8 million.

2.2.1 Construction Work on Railway Track

Little Need to Build New Railway Tracks—1967 to 2000

GO has been operating trains since 1967. When established, GO used existing track owned by Canada's two major railway companies: the Canadian National Railway (CN) and the Canadian Pacific Railway (CP). Both CN and CP operate freight trains on their tracks, and GO had agreements to run its commuter trains on their tracks. Although CN and CP accommodate GO's train schedule as much as possible, ensuring that their freight trains stay on schedule takes precedence for them.

Even into the 1990s, there was little need to expand the train network and construct new track. Therefore, during this period, GO continued to only pay a usage fee to CN and CP.

Railway Track Expansion Initiatives—2000 to Present

Demand for GO train service started to increase in the 2000s, and was forecasted to continue. However, railway companies' freight traffic was hindering GO's ability to increase train service. Therefore, GO's strategy was to buy as much railway track and surrounding land that it could from the railway companies.

Between 2000 and 2011, GO acquired 53% of the track it is currently using; between 2012 and 2014, it acquired an additional 26%. Metrolinx paid $1.2 billion to acquire this land.

Figure 2 shows the chronology of major track purchases. As **Figure 3** shows, Metrolinx currently owns 79% of the track it operates on, while CN owns about 10% and CP 11%.

In instances where CN and CP did not want to sell land to GO or could not negotiate a sale, GO contracted them to construct additional lines of track on CN and CP land. GO then paid CN and CP to use these tracks. This continued after Metrolinx assumed responsibility for GO. If Metrolinx wants to increase the frequency of its train service but existing track cannot handle the increase, it has to contract CN or CP (as required per their agreement) for it to build new track on Metrolinx's behalf.

Figure 2: Changes in Percentage of Track* Owned by Metrolinx since the Inception of GO Transit

Source of data: Metrolinx

Year(s) in Which Track Was Acquired	Railway Track Purchased from Railway Companies (% of Total as of 2014)	% of Railway Track Used by Metrolinx that is Owned by Metrolinx
1967–1999	–	0
2000	22	22
2007	8	30
2009–2011	23	53
2012–2014	26	79

* Total track used by Metrolinx covers a distance of 430 km. In addition, Metrolinx also uses another 70 km of track for its seasonal service in the summer from Hamilton to Niagara. Ownership of this 70 km is not reflected in the table above because the Hamilton-to-Niagara service is not part of Metrolinx's daily commuter service.

Figure 3: Map Showing Track Owned* by Metrolinx, CN Railway and CP Railway

Source of data: Metrolinx

* This ownership map does not include Metrolinx's railway service from Hamilton to Niagara because it only operates during the summer months and is not part of its daily commuter service.

CN and CP have done many construction projects for GO and Metrolinx because they owned much of the land on which GO trains operate. Over the past five years, Metrolinx has paid CN and CP about $725 million to construct and upgrade tracks. This is about 18% of Metrolinx's total construction costs in this period.

Other railway construction work done on Metrolinx-owned land has followed a separate procurement pr ess as described in **Section 2.2.3**.

Long-Term Master Agreements Governed How the Railway Companies Would Deliver Construction Projects

Metrolinx negotiated long-term master agreements with both CN and CP. Metrolinx has two agreements with CN—a Master Operating Agreement and a Master Construction Agreement—which are used based on the type of work performed. The Master Construction Agreement has governed how the cost of construction projects would be determined and projects overseen. CP, unlike CN, has a Commuter Operating Agreement in place with Metrolinx, but it does not cover construction. All construction agreements with CP are on a project-by-project basis.

To build new track, Metrolinx provides each railway company with requirements, such as how often GO trains will run on the new track. CN and CP then develop cost estimates for each project. Work begins once this amount is approved by Metrolinx. Under the terms of their respective overall contracts, Metrolinx can inspect the railway company's work, but it is the railway company's responsibility to build good-quality track that meets Transport Canada's railway-track standards.

Projects can be delivered through one of two approaches: "fixed cost" or "time and materials." According to the master agreements, CN projects can be delivered through either approach; CP projects are almost always delivered only through the time-and-materials approach.

- **Lump-sum approach:** Under this approach, CN provides Metrolinx with a fixed price, or lump-sum amount, to build the additional track. This allows Metrolinx to budget sufficient funds for the project and reduces the risk of cost overruns. CN is responsible for bringing the project in within the lump-sum price; if it goes over budget, it must assume the additional cost. If this approach is used, it is important for Metrolinx to negotiate a fair and reasonable price upfront.
- **Time-and-materials approach:** Under this approach, CN or CP charges all actual construction costs back to Metrolinx. This approach is better suited for more complex projects where costs are hard to estimate upfront. If this approach is used, it is important that invoices, labour hours and quantities of material be verified throughout the project. This ensures that Metrolinx is paying only for the work done for its projects.

2.2.2 Metrolinx Fully Outsources Non-CN-or-CP Projects Using the Traditional Model

For projects not on CN or CP land, Metrolinx outsources to external firms almost all work related to a construction project: the design, construction and oversight. One advantage of outsourcing is that Metrolinx does not have to maintain a workforce large enough to complete major projects. However, outsourcing still requires that Metrolinx maintain good oversight throughout all phases of a project.

Metrolinx uses the same project-delivery model that GO had used since it started operating in 1967. Metrolinx contracts with one entity to prepare the design and with a second entity to construct the project based on the design (this is known as the "traditional model"). The other project-delivery model, which the Ministry used for only six of over 250 projects in the past five years, is to contract with a single entity to both design and construct the project.

Under the traditional model, where the construction contractor is not responsible for the design, Metrolinx retains more control and risk of cost overruns. Under the other model, Metrolinx transfers a significant amount of control and risk of cost overruns to the contractor.

Metrolinx engages external consultants, who are qualified engineers, to create project designs. Oversight is outsourced to an external consultant team that is made up of engineers and other construction staff. Metrolinx also has staff that can perform oversight on some projects; however, they do so only for a few projects that are especially complex and time-sensitive.

Metrolinx's Process for Hiring Contractors

On projects not on CN- or CP-owned land, Metrolinx hires contractors using one of two procurement methods:

- **Pre-qualified contractor, lowest-bid:** In this method, a tender is made available only to pre-qualified contractors, and the lowest-bidding pre-qualified contractor is chosen. Contractors are pre-qualified to bid on projects that are similar in size and complexity to projects they have previously completed. When deciding whether to pre-qualify a contractor, Metrolinx assesses a number of factors, such as the contractor's quality-assurance procedures and the experience of its project team.
- **Any contractor, lowest-bid:** In this method, a tender is publicly made available to all contractors. In order to win a contract, the contractor has to be the lowest bidder.

3.0 Audit Objective and Scope

Our audit objective with respect to construction projects in the transportation sector was to assess whether Metrolinx has effective policies and procedures in place to ensure that:

- contractors are selected in a competitive, fair, open and transparent manner that results in contracts being awarded to qualified bidders only, with due regard for economy;
- there is sufficient oversight of the contractors during construction; and
- final construction results in value for money for Ontarians.

Prior to commencing our work, we identified the audit criteria we would use to address our audit objective. Senior management at Metrolinx agreed to our audit objective and criteria. Our audit work was primarily conducted between December 2015 and July 2016.

In conducting our work, we met with key personnel at Metrolinx' head office where the oversight of construction contracts takes place. We interviewed staff involved in procurement, administration and oversight of construction contracts, and examined related data and documentation, including documentation on the quality of construction work done by contractors. We also met with Metrolinx staff involved in design engineering and examined documentation on construction project designs. In addition, we met with Metrolinx staff who are responsible for administering warranties and ensuring that project deficiencies are fixed by the contractor after construction is complete.

We reviewed a sample of construction projects to form our conclusions in some areas (throughout **Section 4**, we indicate where sampling was performed as a basis to form conclusions). Specifically in **Section 4.2** (where we discuss whether Metrolinx prevents poorly performing construction contractors from being awarded future contracts), we reviewed whether Metrolinx continued to award contracts to contractors that were identified to us as having a history of poor performance. In all other areas where sampling was performed, we chose projects at random and reviewed related project data and documentation, and conducted interviews with project staff.

We contacted other jurisdictions to gain an understanding of, and provide comparisons on a

number of areas of construction contract administration and project management, including the use of liquidated damages and contractor insurance.

We asked Metrolinx's Internal Audit Division for any relevant audit reports, but it had not issued any at the time of our audit.

4.0 Detailed Audit Observations—General

These *Detailed Audit Observations—General* apply to Metrolinx overall and Metrolinx's projects with contractors other than Canadian National Railway (CN) and Canadian Pacific Railway (CP). **Section 5.0** presents our audit observations that apply uniquely to CN and CP.

4.1 Metrolinx Is Not Effectively Addressing the Poor Performance of Design Consultants

Design consultants engaged by Metrolinx are professional engineers who generally have specialized expertise designing projects in the transportation sector. Metrolinx outsources a significant portion of this work to about 20 engineering firms; it does not design any projects in-house. The design consultant includes a team of engineers, including an architect, mechanical engineer, structural engineer and civil engineer. The design consultant develops project designs to ensure that the completed structure will meet both Metrolinx's requirements and regulations such as the Ontario Building Code. The design is tendered along with the construction contract.

Any consultant may bid on Metrolinx projects. Consultants are hired based on a scoring system that factors in their bid price and other qualitative considerations (such as the experience of key staff and a review of the consultant's prior work).

4.1.1 Metrolinx Rarely Takes Action Against Consultants that Submit Project Designs Containing Errors

Because designs created by consultants are used by the contractor to calculate bid prices, they need to be free of error; otherwise, there can be considerable cost overruns during construction. However, Metrolinx rarely takes action when design consultants produce designs that are not feasible to construct, that are unclear or contain errors, that misestimate the quantity of materials required, and that omit specifications. Not only are there no repercussions for the design consultant, but we also noted that the resulting cost overruns can be significant. Overall, about half of all construction projects at Metrolinx in the past five years have had cost overruns on average of 23%—for a total of $303 million.

Understandably, it is possible for even experienced consultants to make errors in their designs. However, the errors we noted were such that they lacked due diligence on the consultant's part. Given that Metrolinx rarely attempts to recover cost overruns from the consultant, there is little incentive for consultants to do better. In addition, fixing these errors during construction can be expensive because Metrolinx negotiates non-competitively with the hired contractor to make the fix, and this contractor is allowed to charge a 20% surcharge on all change orders to account for profit and overhead. (Industry standards provide for surcharges to be incorporated in such situations, but they do not specify the amounts.) If the design was error-free, the price paid by Metrolinx would be based on a competitive bid.

Metrolinx staff explained to us that they commonly face the issue that consultants' designs are not feasible to construct. This means that when a contractor actually attempts to construct according to the design, it will run into major problems that ultimately cost Metrolinx more.

We reviewed a sample of cost overruns on Metrolinx projects to determine how much of them

resulted from design errors and omissions. **Figure 4** shows the additional costs of $22.5 million that Metrolinx paid as a result of design errors and omissions in some of the projects reviewed.

Additional Costs Incurred During Construction Because Consultants' Designs Are Not Feasible to Construct

Metrolinx staff explained to us that a common issue they face is that consultants' designs are not feasible to construct. This means that when contractors attempt to construct according to the design, they run into major problems.

For example, on one project, the consultant created a design for the construction of boiler rooms at an existing GO station but failed to properly assess site conditions. When the contractor began excavating, it found that there were many more cables and wires running underground than shown on the design. Although it is normal to discover additional cables and wires running underground during construction, Metrolinx informed us that the consultant had done an inadequate job of identifying them in comparison to what was expected under the circumstances. As a result, it was not feasible to build the boiler rooms in the intended location. Metrolinx eventually determined that the design was not constructible and terminated the construction contract with the contractor. However, by this time it had already paid the contractor $2.6 million to assess underground conditions in the hope of salvaging the contract. Upon the contract's cancellation, Metrolinx paid another $1.8 million in termination payments to the contractor (at the time

Figure 4: Additional Costs Incurred by Metrolinx Because of Errors and Omissions Caused by Design Consultants
Source of data: Metrolinx

Project Description	Initial Costs of Construction ($)	Additional Construction Costs as a Result of Errors and Omissions by Design Consultants ($)	Amount that Construction Costs were over Budget (%)
Exhibition GO Station Rehabilitation of existing platform and tunnel, and installation of a new elevator	0[1]	4,324,000[2]	n/a[3]
Bloor GO/Union Pearson Express Station Construction of two new platforms for use by GO trains and the Union Pearson Express	38,574,000	13,627,000	35
Erin Mills Bus Station Construction of a new station and bridge with two dedicated bus lanes	16,535,000	1,282,000	8
Weston GO Station Construction of a new platform and modifications to the temporary side platform	27,700,000	1,885,000	7
Stouffville Corridor Construction of a second railway track between the Danforth GO Station and the Unionville GO Station	51,249,000	1,010,000	2
West Harbour GO Station Construction of a new station for the extension of service for the Lakeshore West corridor	44,270,000	400,000	1
Total	**178,328,000**	**22,528,000**	**13**

1. As discussed in **Section 4.4.1**, this project was never constructed. The errors and omissions made by the design consultant were so high that the construction contract had to be cancelled.
2. The payments totalling $4,324,000 that Metrolinx made to this contractor were for doing extra work to identify all of the designer's errors, and for terminating the contract.
3. Given that the contract had to be cancelled and no construction costs were actually incurred, the % amount for this column is not applicable.

of our audit, it had retendered the work to a different contractor). These payments to the contractor of $4.4 million were 55% of the original $8-million value of the contract. Metrolinx did not recover this amount from the design consultant and in fact paid the consultant an additional $766,000 to redesign the project.

Additional Costs Incurred During Construction Because Consultants Made Errors in Their Designs

We also noted that consultants also made errors such as estimating the wrong quantity of material that would be required, or produced vague and unclear designs that led to cost overruns during the construction phase.

On one project in **Figure 4**, the consultant made numerous errors that caused a $38.6 million project to be over budget by 35% or $13.6 million. These errors included incorrectly estimating the amount of concrete and steel required and the number of underground cables required. This cost an additional $6.2 million. Metrolinx also had to pay an additional $5.8 million to the contractor to have additional construction workers present on site so that project timelines could still be met (because fixing the design errors made by the consultant had caused a slowdown in construction work). At the time of our audit, Metrolinx had not attempted to recover the cost overruns it incurred because of the consultant's errors.

Additional Costs Incurred During Construction Because Consultant Failed to Design Major Construction Requirements

We noted several instances where a design consultant omitted certain specifications. Thus, Metrolinx experienced cost overruns because contractors had not accounted for the cost of missing items in their bid price. For example, on one project, the design consultant made an error and did not include in its design the requirement to install a security system. This error was found during construction; it cost Metrolinx $256,000 to have this work done.

On another project, the design consultant performed a poor job of surveying the site to determine how many objects were encroaching on Metrolinx's property. Sites are normally surveyed in advance of construction to identify encroachments that need to be removed prior to the start of construction. During construction, however, the contractor was surprised to find that there were about 30 homes whose fences were encroaching on Metrolinx' property that had not been identified by the design consultant. Construction was halted because the contractor had to inform residents of Metrolinx's construction plans and coordinate the removal of fences. The design consultant on this project also failed to identify numerous trees that were encroaching on Metrolinx's construction site. Working with residents of the nearby homes and removing unidentified trees resulted in the project being delayed and $832,000 in additional expenses to Metrolinx.

Metrolinx Entitled to Recover Cost Overruns Resulting From Design Errors or Omissions, But Has Rarely Done So

Metrolinx's contract with design consultants allows it to recover the cost of their errors and omissions through a claims process with the consultants' insurance company. We noted that Metrolinx did not attempt to recover these costs for any of the projects we reviewed.

When we asked whether Metrolinx had ever done so in the past for other projects, it told us that it had done so in only one instance.

RECOMMENDATION 1

To ensure that it does not incur excessive costs as a result of consultants' design errors and omissions, Metrolinx should implement policies and procedures for reviewing designs for their accuracy, their constructability, and their inclusion of all specifications.

METROLINX RESPONSE

Metrolinx agrees with the Auditor General's recommendation. Metrolinx has historically relied on the professional qualifications of the successfully-tendered Design Consultant; through procurement transformation, we have been developing a more stringent tender process (that is, Request for Qualified Quotations) that puts an emphasis on awarding the contract based on qualifications (previous pertinent experience, qualifications of each design discipline, minimum years of experience) and contracts are awarded on an evaluation weighting of 75% and 25% for qualifications and price respectively. In addition, the use of design-build contracts has also been more recently employed to transfer risk to contractors.

Furthermore, Metrolinx is developing processes to support design compliance, including the identification and documentation of non-compliance (for example, errors and omissions). These processes will identify the parties responsible for the technical review, monitor and encourage consistency in comments, schedule comment resolution meetings, and document and audit against agreed upon resolutions.

We anticipate implementation of these design compliance processes by February 2017.

RECOMMENDATION 2

Where design errors and omissions are found that result in additional costs to Metrolinx, Metrolinx should:

- recover those costs from the design consultant by any means it deems reasonable, including through errors and omissions insurance; and
- consider the design consultant's performance in the awarding of future business.

METROLINX RESPONSE

Metrolinx agrees with the Auditor General's recommendation. If errors or omissions are discovered during the construction phase, Metrolinx works collaboratively with the consultant, the contractor and legal counsel to develop a feasible, cost effective and timely resolution to the issue. In some cases, resolution may include the filing of an errors and omissions claim with the vendor to compensate Metrolinx for additional costs. These efforts are ongoing.

Where there are continued issues with design consultants, the newly developed Vendor Performance Management (VPM) system will document and flag the vendor's performance for consideration during future tenders. Implementation of the VPM system is now substantially complete. Output from the system will first be used in the evaluation of tenders by the end of March 2017. In the following year, VPM output will progressively become available for use across all work categories.

RECOMMENDATION 3

To ensure that all cost overruns resulting from design consultants' errors and omissions are assessed for potential recovery, Metrolinx should implement policies and procedures that:

- enable tracking of cost overruns; and
- clearly define the roles and responsibilities of the staff involved in recovering the overruns.

METROLINX RESPONSE

Metrolinx agrees with the Auditor General's recommendation. As part of managing project budgets and contract costs, processes and procedures will be enhanced so that any construction cost changes due to design error and omissions will be reviewed, documented and assessed for cost recovery. As part of the revised procedures, roles and responsibilities will be defined to ensure consistent capture of

the costs attributed to design errors and omissions, enabling the organization to acquire the information needed to more easily recover these costs.

4.1.2 Metrolinx Is Not Effectively Addressing the Problem of Design Consultants Not Meeting Deadlines

There are serious consequences if design consultants do not meet deadlines—the entire project is delayed because construction work cannot begin until the design is finalized. However, nothing in design consultants' contracts addresses missed deadlines. The only action Metrolinx can take against late-delivering design consultants is to terminate the contract. Furthermore, Metrolinx does not take consultants' track record for timeliness into account when hiring them for future projects.

Through our review of project files, we identified that design consultants were not meeting timelines because the consultant team lacked the necessary expertise or not did not have enough staff to complete the work on time.

We noted one project where a design consulting firm made numerous mistakes that demonstrated it did not understand the project nor what was required of it. Metrolinx informed us that the design consultant should have taken no more than nine months to produce a suitable design; instead, it took 17 months. This significantly delayed the construction phase of the project. Metrolinx noted numerous errors in the design consultant's work and requested them to be fixed; yet, when it reviewed the consultant's final submission, it noted that the consultant still had not addressed many of the requested changes. In a letter sent to the consulting firm, Metrolinx stated the following about the consultant's performance:

> In reflection of *[Consultant X]*'s level of performance experienced in relation to the project, Metrolinx formally wishes to convey our discontent. We feel that design quality and coordination issues along with prolonged resolution of project issues is causing undue delay and confusion. The copious amount of design revisions originating from *[Consultant X]*'s poorly managed quality control process has become abundantly evident since the inception of construction. This re-occurring issue has caused delay and increased costs, which is not acceptable to Metrolinx. The construction of the improved Station is a high-profile and time sensitive project needing to be addressed by a professional level of management. We are concerned that level of management is not being provided.

In another project involving the construction of new station platforms, we noted the design consultant missed deadlines and delayed the project, which took nine months instead of five months to complete. Metrolinx staff noted that the delays were mainly a result of the design consulting firm being disorganized and unable to guarantee that its engineers were available and free to complete the design. During a six-month period on this project, the design consultant did not respond to numerous emails and phone calls from Metrolinx. Also, throughout the project, the design consultant provided designs in a piecemeal manner. Without having a complete design, the contractor hired by Metrolinx was unable to order special construction materials that required a long lead time for delivery.

Again, in both of these projects, and other projects we reviewed, despite the fact that the design consultants clearly did not provide professional and timely service, Metrolinx did not hold them financially accountable.

RECOMMENDATION 4

To ensure that construction projects are not delayed because of the design consultant's failure to meet project timelines, Metrolinx should:

- include contract provisions that allow it to address poorly performing consultants who do not meet project timelines; and

- implement a system where consultants' track record for timeliness is taken into account when hiring them for future projects.

METROLINX RESPONSE

Metrolinx agrees with the Auditor General's recommendation and is taking action by implementing a Vendor Performance Management (VPM) system that will provide regular and timely feedback on a consultant's timeliness and will provide a defensible and documented basis for assessing their suitability to bid on future projects. Output from the system will first be used in the evaluation of tenders by the end of March 2017. In the following year, VPM output will progressively become available for use across all work categories.

Further, Metrolinx will look into provisions to contracts that will allow it to address poorly performing consultants that do not meet project timelines.

4.2 Metrolinx Rarely Prevents Poorly Performing Construction Contractors from Being Awarded Future Contracts

Even when a contractor has a history of poor performance on Metrolinx projects, Metrolinx takes little action to prevent it from working on future projects. A contractor might repeatedly be late in delivering work, not construct the project according to the approved design, not follow safety regulations and/or not fix deficiencies on time—yet Metrolinx will hire the contractor for future projects, provided it is the lowest bidder. Metrolinx rarely factors reviews of a contractor's references and the contractor's past performance into its decision to award it a contract.

Similarly, once Metrolinx has put a contractor on its roster of pre-qualified contractors, it does no further assessment of whether the contractor's performance has continued to be acceptable.

We noted that there are several contractors that have a history of poor performance to which Metrolinx continues to award construction projects.

4.2.1 Metrolinx Awarded One Poorly Performing Contractor 22 More Projects after Issues Began in 2009

We noted that, in 2009, Metrolinx issued a letter of default to one contractor because construction workers had not even shown up on the project site for several weeks. (Such letters are only issued where a contractor has made no attempt to rectify serious problems.) Despite this, since then, Metrolinx has awarded this contractor 22 more projects worth a total of $90 million. We reviewed a sample of these projects and noted that the contractor continued to perform poorly on some of these projects.

In 2012, for example, this contractor installed several pieces of substituted equipment and building materials that were not approved in the contract. Although contractors are required to have Metrolinx review and approve all such substitutions to ensure they meet required specifications, the contractor did not do so.

- In one case, this contractor used concrete in the base of a train platform that was not air-entrained according to the requirements (air-entrained concrete has billions of microscopic air pockets that allow water trapped in the concrete to expand during winter). When Metrolinx staff learned that this inferior concrete had been used, they chose to accept it because making the contractor replace it would have taken too long and further jeopardized project timelines. However, this concrete may require earlier maintenance in the future because it is more susceptible to cracks than the concrete that had been specified.
- In another instance, this contractor installed an inferior-quality diesel-dispensing machine even though it posed a safety risk (in this instance, because of the safety risk, Metrolinx instructed this contractor to replace it with the specified equipment).

Unapproved substitutions should not occur in the first place because they are against the terms of Metrolinx's agreement with the contractor, and because if they are not adequate, they can cause excessive delays while being fixed. In addition, there exists a risk that substitutions may remain undetected – which could increase future costs to Metrolinx, or pose a safety hazard.

Despite this contractor performing many unapproved substitutions, it was awarded another contract in 2013. On this project, valued at $9 million, the contractor was late in fixing about 25 construction deficiencies in its work. Metrolinx's generally accepted time frame is 30 to 90 days; however, the contractor took six months. One of the deficiencies was the failure to install a functioning camera and surveillance system in a GO station. The absence of a functioning system during this period posed a security risk for commuters using the station.

Metrolinx continues to allow this contractor to bid on contracts.

4.2.2 Metrolinx Awarded a Contractor Phase 2 of Pickering Bridge Project Even Though It Had Performed Extremely Poorly on Phase 1

The contractor for Phase 1 of the construction of a pedestrian bridge over Highway 401 in Pickering performed so poorly that Metrolinx staff had to take over performing many of its duties. Nevertheless, Metrolinx hired the same contractor for Phase 2 of the project because it was the lowest bidder. On Phase 2, the contractor caused significant damage to the bridge. Nevertheless, Metrolinx paid the contractor almost the full $8 million of their contract. We noted that, after performing poorly on both Phase 1 and Phase 2, Metrolinx still awarded this contractor another major project valued at $39 million.

The bridge in question is a landmark structure allowing pedestrians to cross 14 lanes of Highway 401 between the Pickering GO Station and the evolving Pickering City Centre development. Phase 1 of the project involved the construction of the bridge and stairwells; Phase 2 involved the installation of external cladding over the bridge. The bridge was to serve, according to the City of Pickering website, "as an iconic, luminous landmark, signifying where Pickering and Durham Region begin."

Phase 1: Contractor Demonstrated Complete Lack of Experience in Building Bridges

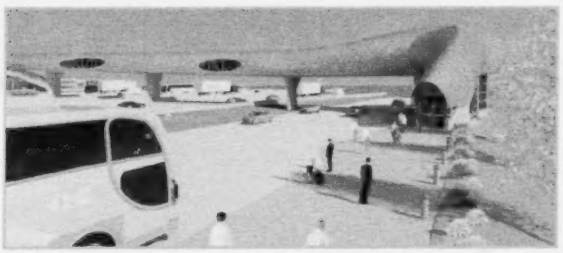
Although building the bridge structure and stairwells would be fairly straightforward for an experienced contractor, the contractor awarded the job was performing poorly; as a result, Metrolinx staff had to take over and manage many of its responsibilities on this $19-million project.

For example, the contractor had no experience in installing the bridge trusses (a bridge truss is the metal skeleton that is the most basic component of the bridge), something that a contractor constructing a bridge would be expected to know how to do. In fact, it installed one truss upside down. Seeing this, Metrolinx project staff stepped in to manage the truss installation even though this was clearly the contractor's responsibility. They managed the truss supplier and related sub-trades, arranged the delivery of the trusses, shut down Highway 401 during installation, and managed other aspects of traffic flow. Metrolinx staff also went so far as to find a hauling company to move the trusses to the site: work that all should have been managed by the contractor. The contractor was still paid the full $19 million in payments.

Phase 2: Contractor Again Won Contract Despite Poor Performance then Damaged the Bridge

Although Metrolinx was aware of this contractor's lack of experience, its poor work ethic, and its unwillingness to improve performance, Metrolinx did not restrict it from bidding on Phase 2 of this project. Because this contractor's bid was the lowest, Metrolinx awarded it the contract for the second phase of work.

Figure 5: Design of Iconic Pickering Pedestrian Bridge vs. Bridge as Actually Constructed
Source of data: Metrolinx



Artist's Rendering of North Plaza of the Pickering Pedestrian Bridge, showing special cladding design, which should have been built by 2013.

Photo of North Plaza of Pickering Pedestrian Bridge at the time of our audit in September 2016.

The contractor's performance was again poor—poor enough, in fact, that Metrolinx eventually terminated its contract. But not before the contractor caused significant damage to the bridge. By improperly welding some metal components, workers splattered metal over large areas of glass. A glass expert hired by Metrolinx later identified that 87% of the glass had been damaged, and recommended that it all be replaced. Metrolinx estimates it will cost about $1 million to fix the glass.

Metrolinx also discovered that the contractor built the stairwell incorrectly (in Phase 1). Because the stairwell had been built too wide, the cladding material would break if the contractor attempted to stretch it over the stairwells. The contractor did not fix the stairwell and, at the time of our audit, the problem still had not been solved. Metrolinx was working with an engineering firm to develop a cost-efficient solution to fix the stairwell problem at its own expense. **Figure 5** shows the concept of the iconic bridge, and what is in place today because of the contractor's mistake in constructing the stairwell.

Metrolinx terminated the contract with the contractor, even though the stairwell portion of the job had not been completed. Nevertheless, Metrolinx signed a settlement agreement, and paid the contractor 99% of the contract's original value of $8 million.

We noted that after the contractor's poor performance on both Phase 1 and Phase 2 of this project, Metrolinx awarded this contractor another project valued at $39 million.

After that, Metrolinx chose not to award the contractor work on a few projects (for which the contractor provided the lowest bid) because it was not deemed qualified to perform the work based on past performance with Metrolinx. We discuss our concerns with this in **Section 4.2.3** below.

4.2.3 Metrolinx Lacks a Process to Prevent Poorly Performing Contractors from Bidding on Future Contracts

Although it is rare for Metrolinx to reject contractors on the basis of poor performance, we noted that, in the case of the contractor discussed in **Section 4.2.2** above, it did so because it felt it had sufficient documentation to defend its decision, if necessary, if the contractor took it to court—which in fact it did. Metrolinx told us that the legal burden of proof is so high that it cannot require staff to document poor performance to this degree on all projects.

In addition to rejecting the contractor discussed in **Section 4.2.2**, Metrolinx informed us that it has rejected only one other contractor in the past 18 months because of performance issues. At the time of our audit, contractors that had a history

of performance issues (including the contractor discussed in **Section 4.2.1** that had poor performance since 2009) were able to continue to bid on Metrolinx contracts. This is because Metrolinx does not have a process in place to identify poorly performing contractors when it is making the decision to award contracts. Thus, contractors can take advantage of this and continue to perform poorly without repercussions.

RECOMMENDATION 5

To ensure that contractors known to have poor performance do not jeopardize the success and safety of future Metrolinx projects, Metrolinx should implement policies and procedures to:

- track contractors' performance in a centralized system; and
- incorporate this performance into its decision to award future business with Metrolinx.

METROLINX RESPONSE

Metrolinx agrees with the Auditor General's recommendation and agrees it is important to manage contractors with a history of safety issues. Metrolinx has begun to implement a process to address this issue, including an enhanced reference check process, however additional activities are underway to address the recommendations. In January 2015, Metrolinx began implementation of its Vendor Performance Management (VPM) system that evaluates performance of vendors on current contracts and generates individual performance scores, which will be included in the evaluation of future bids in order to drive continuous vendor improvement and influence the award of future contracts. Output from the system will first be used in the evaluation of tenders by the end of March 2017. In the following year, VPM output will progressively become available for use across all work categories.

Metrolinx is also proactively ensuring contractor safety performance by implementing the Certificate of Recognition (COR) program as a mandatory requirement on all construction procurements. COR is a leading industry safety standard that ensures the contractor has in place a comprehensive health and safety management system.

4.3 Metrolinx Does Not Take Action Against Contractors that Breach Safety Regulations During Construction

Metrolinx does not take into account whether contractors have breached safety regulations during construction when awarding future contracts. Even when contractors' failure to secure safe conditions has resulted in safety issues to the public as well as construction workers, Metrolinx has taken no action against the responsible contractor.

Primary responsibility for establishing workplace safety regulations lies with the Ministry of Labour, which establishes safety standards (through the *Occupational Health and Safety Act*) that must be met by contractors while performing construction work. The regulations within the Act dictate matters such as what type of protective equipment must be worn, how scaffolds should be erected, and what measures should be taken while working in public areas. It is the contractor's responsibility to ensure that they meet safety standards.

However, Metrolinx is indirectly responsible to ensure that a safe workplace is maintained on its projects at all times. For this reason, Metrolinx conducts periodic audits of construction sites to assess whether a contractor is following all safety regulations. It audited 25 different projects in the past three years. We noted that in each of the 25 projects, Metrolinx staff found instances of contractors not following safety regulations and procedures. Regulations that were frequently breached include:

- *Flammable materials not properly stored and labelled:* In three projects, the contractor stored highly flammable materials, such as gasoline and diesel, in improper containers without required signage, such as "No Smoking". This increased the risk of a fire or explosion if workers were to smoke too close to the flammable materials.
- *Scaffolds erected improperly:* In three audits of two different projects, the contractor improperly erected scaffolds by failing to install a fence or guardrail on the scaffold, and failing to properly secure all scaffolding pipes together. Construction workers are at risk of injuring themselves if they fall over the edge.
- *Construction site not closed off:* On one project, Metrolinx staff noted that the construction site was not fenced off and was open to public access. Since the construction site was in the middle of a GO station, it should have had a 1.8-metre-high fence to separate it from public areas.

In each of these instances, Metrolinx informed us that the contractor, upon Metrolinx's request, had stopped the unsafe behaviour right away. However, we noted that there were no further follow-up audits to determine whether the contractor continued to breach safety regulations, nor any repercussions for the contractor for its unsafe actions. Although injuries did not occur as a result of these safety violations, we noted that similar safety breaches on other projects did cause injuries to the public or workers, including the following:

- While workers performed some routine excavations, a gas line ruptured because gas lines were not properly labelled and handled as per regulations. This resulted in a gas leak that posed the risk of a fire or explosion
- A scaffolding pipe fell on a road, hitting a vehicle, because all pipes were not properly erected and secured.
- A pedestrian who wandered onto a construction site slipped and fell because the site, even though in the middle of a GO station, was not partitioned properly and was open to public access.

Although Metrolinx is aware of these safety breaches, the contractors continue to work for Metrolinx without being fined or having to face other repercussions.

We recognize that Metrolinx requires its contractors to have a Certificate of Recognition that certifies that a contractor has in place a comprehensive health and safety management system. Although a contractor can have this Certificate, this does not always mean that it operates in accordance with the Certificate's conditions.

We asked Metrolinx whether it has prevented contractors that have a history of breaching safety regulations from bidding on future Metrolinx projects within the past five years; Metrolinx informed us that it has done so in one instance.

RECOMMENDATION 6

To reduce the risk of jeopardizing worker and public safety because of safety breaches made by the contractor, Metrolinx should implement policies and procedures to address all instances of safety breaches found during safety audits, and all instances of safety incidents by:

- requiring contractors to develop remedial plans to ensure that safety breaches or safety incidents do not re-occur;
- implement follow-up audits to verify whether remedial plans have been implemented; and
- take frequent and/or serious safety breaches and incidents into consideration, as part of its contractor performance management system, when awarding future contracts to contractors.

METROLINX RESPONSE

Metrolinx agrees with the Auditor General's recommendation and will further strengthen its audit process by requiring the follow-up of all safety audits. Safety is a key Metrolinx priority,

and we have "zero tolerance" for safety violations. Metrolinx has an established Construction Safety Management Program that includes mandatory safety training for all workers, including those of subcontractors, doing construction on rail corridors. Over 20,000 workers have been trained and safety infractions can result in revocation of the ability to work on Metrolinx projects.

Metrolinx includes various remedies in its contracts, including strict requirements to remedy issues where safety breaches occur. These contractual terms work together to reduce the risk of safety violations by ensuring that the contractor complies with all safety obligations. Compliance is currently monitored through periodic site audits; however, where safety breaches or safety incidents do occur going forward, contractors will be required to develop remedial plans and Metrolinx will conduct and document the results of follow-up audits to verify that the remedial plans have been implemented.

Metrolinx has substantially implemented a new Vendor Performance Management System, which will take into account past safety performance and influence future contract awards. During the evaluation of each contractor bid submission, references will be reviewed and safety-related feedback will be factored into the evaluation. Additional system-based components of the program are to be completed by March 2017.

4.4 Construction Contractors' Delivering Work Late Results in Additional Costs to Metrolinx—and Inconveniences Commuters

Just as Metrolinx does not address the problem of design consultants who are late in delivering work, Metrolinx does not take action against contractors that do not deliver on schedule—even though it incurs significant costs because of contractors completing projects late.

A common tool used in the construction industry to incentivize contractors to deliver projects on time is to assess financial penalties, such as liquidated damages, if a contractor is late in completing work. Liquidated damages are an estimate of the costs an organization would incur in the event that a contractor breaches the terms of the contract—for example if a contractor finishes a job late, an organization would incur additional costs for amounts it pays to consultants who oversee the contractor. This means that if the contractor is late in delivering a project, and Metrolinx had incorporated liquidated damages in its contracts, Metrolinx could charge and recover the amounts it had specified in the contract. Unlike other penalties and fines, liquidated damages are legally enforceable—meaning that the courts would generally uphold these amounts in the event that the contractor disputes these fines through a lawsuit—if the amount is a reasonable pre-estimate of damages, and if it can be determined that the contractor is at fault for the delay.

The use of liquidated damages is an easy way to promote timely delivery by contractors, and is a standard practice in the industry. For example, they are used in Ontario by the Ministry of Transportation and in other North American jurisdictions by transit agencies in cities such as Chicago, New York City and Washington, DC.

We noted that Metrolinx does not incorporate liquidated damages provisions as a standard clause in all of its contracts, but rather incorporates it on a case-by-case basis only.

4.4.1 Metrolinx Incurs Significant Costs Because of Contractors Completing Projects Late

During our audit, we reviewed several projects that were completed later than scheduled. For the most part, delays on these projects were as a result of contractors not adhering to project schedules. **Figure 6** shows examples of the additional costs incurred by Metrolinx because of delays caused

Figure 6: Additional Costs Incurred by Metrolinx because of Delays Caused by Contractors[1]

Source of data: Metrolinx

Project Description	Months Project Delayed due to the Contractor	Initial Budget for Oversight Services ($)	Additional Costs for Consultants' Oversight Services because of Delays ($)	Amount that Oversight Costs Were Over Budget (%)
Barrie Fuelling Facility Construction and installation of new fuelling systems for trains	6	97,000	153,000	158
Burlington GO Station Construction of a new station building to address increased ridership and crowding issues	24	193,000	501,000	260
Clarkson GO Station Construction of a multi-level parking garage to alleviate significant parking shortages	12	180,000	104,000	58
Lincolnville Fuelling Facility Construction and installation of new fuelling systems for trains and buses	25	218,000	355,000[2]	163
Malton GO Station Construction of a new station entrance and other upgrades to improve platform accessibility	14	151,000	361,000	239
Maple GO Station Construction of various upgrades to the station	4	43,000	54,000	126
Mount Pleasant GO Station Construction of a new parking lot to alleviate significant parking shortages	4	169,000	54,000	32
Pickering GO Station Construction of a multi-level parking garage to alleviate significant parking shortages	7	299,000	495,000	166
Total		**1,350,000**	**2,077,000**	
Average				**150**

1. These amounts only include additional costs paid to consultants for overseeing the contractor (they also exclude taxes). Metrolinx informed us that it also incurs other costs when projects are delivered late, such as the amount of lost revenue, which are difficult to estimate.
2. As discussed in **Section 4.4.1**, additional costs for this project were $585,000. Metrolinx recovered $230,000 from the contractor, and thus the remaining $355,000 was a cost fully borne by Metrolinx.

by contractors. (Some delays occur on projects because of factors outside the contractor's control, such as delays in receiving construction permits from the relevant authorities. However, we did not include these types of delays in **Figure 6**.)

In the projects we reviewed, liquidated damages were not incorporated in the terms of the contract. As such, Metrolinx could not charge contractors a financial penalty for delivering work late even though it incurred significant additional costs because of the contractors' delays.

We asked Metrolinx why it does not incorporate liquidated damages in all its contracts. It informed us that it does not do so because liquidated damages are only an estimated amount that is calculated at the beginning of a project, and it

would prefer to recover actual costs it incurred. It informed us that actual costs are usually greater than the original estimate (these costs could include factors such as loss of revenue that are not included in the liquidated damages estimate).

Although we were informed that Metrolinx's preferred approach was to recover these actual costs through a lawsuit against the contractor, we noted that Metrolinx has never, in fact, taken any contractors to court to recover actual costs it incurred because of contractors' delays. In only one of the nine projects we reviewed, we noted that Metrolinx attempted to partially recover actual damages it incurred, not through a lawsuit, but rather by negotiating with the contractor. On the Lincolnville Fuelling Facility project, Metrolinx recovered $230,000 of the total $585,000 incurred in additional costs (the remaining $355,000 was a cost borne by Metrolinx).

Examples of Why Contractors Cause Delays

There are several reasons why contractors are not able to meet deadlines. They include the following:

- **Lack of activity on construction site:** On one project, the contractor fell about one month behind schedule because construction staff failed to show up to work. Initially, there were delays in getting mobilized, and later, construction materials that arrived on site remained unused and were not installed for several days. The contractor also delayed the installation of a barrier wall that was critical to meeting project timelines. Because of the number of days of inactivity on this project, any cushion built into the project schedule for weather and other unforeseen conditions was lost.
- **Inability to manage large projects:** On another project, the contractor was unable to manage its staff and schedule when any changes were required on the project. Changes are normal on construction projects, and contractors have to be able to quickly provide quotes for changes and be able to carry out the changes in a timely manner. However, project staff informed us that the contractor was slow in providing quotes and rarely submitted project schedules that would allow Metrolinx to develop strategies to get back on schedule. When the contractor was rated at the end of the project, its performance was so poor that it received a score of 2 out of 9 for its ability to stay on schedule, 3 out of 9 for its ability to remain organized throughout the project, and 3 out of 9 for its ability to manage and respond to changes on the project.

4.4.2 Contractor-Caused Delays Postponed Much-Needed Service Improvements for Commuters

In addition to increasing costs for Metrolinx, delays caused by contractors can also negatively affect GO commuters. Of the projects reviewed, we noted that commuters at two different GO stations were inconvenienced because the contractor was significantly late in building two new parking garages (the same contractor was hired to build both garages). Commuters at these two GO stations had faced parking shortages for six months and one year.

At one station, a garage was to be built to address the shortage of parking spaces so severe that GO customers sometimes parked on sidewalks. The contractor was to build a multi-level parking garage that could hold 1,500 cars. However, because the contractor was significantly delayed, Metrolinx decided to open the lower floors of the garage while the contractor continued to build the upper floors. During this time, only 700 of the planned 1,500 parking spaces that were needed at the GO station were actually available. In the end, the contractor was about a year late in completing the project. During this time, customers also did not have access to the garage's elevators.

At the second GO station, the contractor was about six months late in building a 1,200-car parking garage; commuters were forced to park

elsewhere in public parking lots. Even after the six month delay, the contractor took an additional two months to complete a pedestrian bridge connecting the parking garage to the GO station. During that time, commuters on all floors had to use an alternative route and walk a longer distance to the station.

Other difficulties Metrolinx faced with this contractor include:

- In one instance, Metrolinx sent a letter to the contractor expressing concern that the project was already one year behind schedule and the delay was impacting its customers. The contractor simply replied that Metrolinx had failed to identify how customers were being impacted; it did not address the issue of how it planned to get back on schedule.
- In another instance, the contractor failed to provide an updated project schedule reflecting revised timelines even after Metrolinx requested it nine different times over a two-month period.

Despite these serious problems with the contractor, Metrolinx took no action to fine them for being late in completing the project. This contractor can continue to bid on Metrolinx projects.

RECOMMENDATION 7

To ensure that Metrolinx limits its exposure to additional costs and that its customers are not inconvenienced because of contractor-caused delays on construction projects, Metrolinx should incorporate disincentives, such as liquidated damages, in all its construction contracts for situations where contractors fail to meet project timelines.

METROLINX RESPONSE

Metrolinx agrees with the Auditor General's recommendation. Metrolinx is moving forward with developing and documenting a process to objectively calculate appropriate liquidated damages (LD) for each project. With the ability to assign an LD amount, staff will be able to more consistently include the LDs as part of the contract requirements and therefore be able to impose these LDs when contractors fail to meet project timelines.

In order to help with project timelines, Metrolinx is also incorporating a scheduling system, which will be used to help monitor and manage the contractor's progress. This will allow Metrolinx to oversee contractors more diligently and identify when the contractor is trending to delivering the project late. This more robust scheduling requirement is being implemented for new initiatives and is currently being finalized with sign-off expected by December 2016.

4.5 Metrolinx Is Experiencing Delays With Contractors Not Fixing Deficiencies in Their Work in a Timely Manner

Metrolinx experiences delays when contractors do not fix deficiencies in their work that remain outstanding after a project is substantially complete. We noted that Metrolinx does not take such delays into account when selecting contractors for future contracts. In 15 out of 20 projects we reviewed, we noted that contractors took much longer than the industry standard of two months to fix all deficiencies. On average, these contractors took almost eight months to fix outstanding deficiencies. These issues were not restricted to one contractor. On a few projects we reviewed, we noted it took the contractor more than one year to fix deficiencies.

Once Metrolinx determines that a structure or facility is ready for its intended use, it issues the contractor a "certificate of substantial completion." It is accepted practice in the construction industry that some deficiencies might still exist even though the contractor has received the certificate. For example, a building deemed ready for use might still have some exposed nails or uncovered electrical wires that need to be fixed. The important

issue is that such deficiencies be taken care of within about two months (the industry standard).

Under the *Construction Lien Act*, Metrolinx is required at substantial completion to pay the contractor 10% of the total project value, which has been held back until this point. With this payment, the contractor has now received almost the full amount of the contract—usually 98%—so there is little financial incentive left for it to fix deficiencies quickly. We also noted that Metrolinx does not consider a contractor's speed in fixing deficiencies when making decisions on awarding future contracts.

For example, on one project for the construction of a parking garage at the Clarkson GO station, it took the contractor 19 months after substantial completion to fix leaking pipes, automatic door openers not working, and an electrical box not having a lid, meaning that electrical wires and cables were uncovered.

We also noted that staff in operations who are responsible for administering warranties were unaware of warranty provisions that were included in the Metrolinx contract. For example, Metrolinx staff were unaware that deficiencies were covered, under warranty, for a period of two years after they were fixed. Metrolinx staff in operations informed us that it is common for problems to arise even after contractors fix deficiencies; however, they have never tracked nor followed up on these problems with the contractor because they were unaware of the warranty provisions for deficiencies.

When there are many deficiencies, or even if the deficiencies create a safety risk, although Metrolinx would prefer to fix the deficiencies itself rather than wait for the contractor to do so, it does not because doing so would void the contractor's warranty. For example, if Metrolinx staff fixed a leaking pipe by sealing it, the contractor would void the warranty on the pipe and related components.

We noted that on one project, a contractor had about 300 deficiencies in total, including serious issues such as a smoke detector system not functioning in a room where electrical equipment was running, a heating system that did not produce adequate heat in the winter, and information signs hanging in a way that they would swing in the wind, posing a safety hazard for commuters. On this project, the contractor was unresponsive to multiple emails from Metrolinx staff asking for the deficiencies to be fixed. Despite the inconvenience and safety risks to Metrolinx customers caused by these deficiencies, Metrolinx did not take action to fix them themselves in order not to void the contractor's warranties.

RECOMMENDATION 8

To ensure that deficiencies do not remain unfixed, Metrolinx should:

- include contract provisions that require contractors to fix deficiencies within acceptable industry standards;
- take contractors' past performance in fixing deficiencies into consideration, as part of its contractor performance management system, when awarding future Metrolinx business; and
- provide training to staff responsible for administering warranties to ensure they have sufficient knowledge and understanding of all warranty provisions stipulated in the construction contract.

METROLINX RESPONSE

Metrolinx agrees with the Auditor General's recommendation. Metrolinx will review its current practice for contractors fixing deficiencies and incorporate changes into future contracts that align timeframes for completing these fixes that are more in line with industry standards.

The new Vendor Performance Management (VPM) system will also track and use individual project close-out reports, and identifies any recurring issues around remediation of deficiencies. Implementation of the VPM system is now substantially complete. Contractors' past performance in fixing deficiencies will be built

into this system to ensure past performance is considered. The use of this system will first be used in the evaluation of tenders by the end of March 2017.

Metrolinx will ensure staff responsible for administering warranties use consistent methods, requirements, and timelines for remedying deficiencies across Capital Projects Group contracts. This will be facilitated through the implementation of the new Contract Management and Administration procedures and associated staff training, by third quarter 2017. Metrolinx will revise its warranty provisions to provide an incentive to its contractors to remedy warranty items, which may include use of holdbacks and other security.

4.6 Metrolinx Allows Contractors to Subcontract up to 100% of Projects Yet Does Not Vet Subcontractors

Metrolinx allows contractors to subcontract up to 100% of their work to subcontractors, yet it does not pre-screen the subcontractors for reliability. Also, because Metrolinx does not have a direct contractual relationship with the subcontractors, it is limited in the actions it can take when subcontractors fail to perform at expected levels. Common industry practice is for organizations to require a contractor to disclose *all* its subcontractors shortly after winning the project. However, Metrolinx does not require this; it only requires contractors to disclose information about its *major* subcontractors.

Subcontracting in itself is not problematic because some large projects can only be delivered with the co-ordination of various sub-trades. Sub-trades are usually small contractors that specialize in specific areas such as roofing, plumbing and electrical. Subcontractors, even small ones, can still have a major impact on large infrastructure projects. They need to be skilled, professional and timely so as not to adversely affect the quality of the project or hinder overall project timelines. No matter how professional the main contractor is, the quality of the sub-trades can severely impact project timelines.

4.6.1 Subcontractors' Poor Performance Delays Projects; No Process in Place to Track and Prevent Them From Working For Metrolinx Again

Metrolinx has experienced issues with sub-trades; for example, in 2010 a sub-trade walked off the job on one project and jeopardized project completion. Subsequent to that incident, Metrolinx staff requested that Metrolinx pre-screen sub-trades to ensure that sub-trades with a poor work history do not jeopardize project timelines. However, we noted that Metrolinx has not implemented such a process.

In our review, we noted that Metrolinx experienced a similar situation again during the construction of a station building in 2013. On this project, the contractor was supposed to complete roofing and mechanical work promptly so that the project could advance to the next phase. However, this work was not done for about two months and delayed the project. During this time, Metrolinx was actually not aware that the contractor had subcontracted this work, and that there were issues with the sub-trade. Eventually, the sub-trade walked off the job, taking important project documents and drawings. This led to additional delays as it took the contractor about another three months to reacquire the documents and find a replacement sub-trade.

In this case, Metrolinx could have put the main contractor at default because it is the contractor's responsibility to complete the work. We noted that Metrolinx decided not to pursue this route because finding a new contractor at that point would have further delayed the project and increased construction costs.

Although it is the contractor's responsibility to ensure a project is completed on time, it is important for Metrolinx to pre-screen which sub-trades

will be doing the work to ensure that it is taking proactive steps in managing its projects and timelines.

4.6.2 Metrolinx Allows Contractor to Subcontract 100% of the Project; Sub-Contractor Performance Issues Significantly Delay the Project

During our audit, we noted one project in which the contractor subcontracted 100% of the work to a sub-trade, which in turn further subcontracted half its work to sub-sub-trades—which it failed to pay. The sub-sub-trades were unpaid and had walked off the job, delaying the project by eight months.

One important control to ensure that subcontractors do not walk off the job is by requesting the main contractor to certify that all sub-trades have been paid. Metrolinx requests this certification from the main contractor before actually paying it. However in this case, although the main contractor was able to certify that it had paid its sub-trades, there were unpaid sub-sub-trades that walked off the job, delaying the project by eight months.

In addition, because the main contractor had subcontracted 100% of the work, it was never seen on site. Yet when Metrolinx staff attempted to deal with the situation, the subcontractor refused to take direction from them because it said it was not legally obliged to do so.

RECOMMENDATION 9

To ensure that poorly performing sub-trades do not delay projects, Metrolinx should assess industry best practices of pre-screening sub-trades and consider implementing a policy on pre-screening sub-trades based on industry best practices.

To ensure that poorly performing sub-trades do not adversely impact projects, Metrolinx should implement, through its contractor performance management system, a process to hold general contractors accountable for the performance of their sub-trades.

METROLINX RESPONSE

Metrolinx agrees with the Auditor General's recommendation. Metrolinx requires that contractors provide a listing of all sub-trades performing major divisions of work within five business days after contract execution. Metrolinx will review industry best practices and revise its current process of pre-screening contractors to incorporate both large and small projects with respect to sub-trades.

Metrolinx is incorporating a Quality Management Program (QMP) that requires every consultant and contractor to submit a quality management plan detailing how that firm ensures quality products and services. All sub-consultants or sub-contractors will be required, as a flow-down, to provide the same. Metrolinx will, in turn, review the QMP for robustness and thoroughness. Metrolinx will also audit the vendors against their QMP to provide assurance that firms are following their own processes to provide us with quality construction or consultant deliverables. This clause has already been implemented in large consultant contracts that are currently being procured and will be included in future construction procurement by June 2017.

The performance of the general contractor will be evaluated by Metrolinx's Vendor Performance Management (VPM) system. Should a sub-trade of a contractor fail to perform, it will be reflected in the contractor's VPM score, which will then be used to evaluate and qualify the contractor for future Metrolinx projects. This ensures that the contractor is incented to effectively manage the performance of its sub-trades. The VPM is substantially implemented, and related system components will be implemented, by March 2017.

RECOMMENDATION 10

To ensure that it can protect its rights as an owner and prevent contractors from misusing their right to subcontract, Metrolinx should:

- set limits on the total amount of work that contractors can subcontract to any one company; and
- include contract provisions that protect its interests in situations where sub-trades and sub-sub-trades are used.

METROLINX RESPONSE

Metrolinx agrees with the Auditor General's recommendation and has recently taken steps to mitigate the noted risks by now including provisions that contractually obligate the contractor to ensure performance of its sub-trades. These contractual terms hold the contractor accountable for its sub-trades' performance. Additionally, should a sub-trade fail to perform, this will be reflected in the contractor's performance and captured in its Vendor Performance Management (VPM) score, which will then be used to evaluate the contractor for future Metrolinx projects. While the VPM system is substantially implemented, system-based components will be fully implemented in March 2017.

Metrolinx has identified a strategy for implementing a maximum percentage of work that contractors can subcontract for delivery of the work. Next steps involve meetings with industry associations (for example, Ontario Road Builders' Association and Ontario General Contractors Association) for their input prior to implementation. We anticipate incorporating the required percentages into all consultant and construction contracts by June 2017.

4.7 Metrolinx Accepts Handover of Nearly Completed Projects even though Critical Items Are Still Outstanding

Metrolinx does not require that all essential elements of a project be completed before it takes ownership of the project from the contractor. Although project handover usually occurs when about 98% of project payments have been made, some items that are critical to the operation of the structure or facility can still be outstanding at that point. We noted that Metrolinx does not specify which items must be completed before handover. We also noted that Metrolinx has taken ownership of projects well in advance of the contractor completing basic work necessary for the operation of the structure or facility. This is especially a concern because, as discussed in **Section 4.4**, contractors are often late in delivering items after substantial completion.

On station improvement projects, we noted that there is no requirement for a contractor to install security cameras and related surveillance systems before handing over a project. We noted that several stations had opened for public use without a surveillance system. In one case, the contractor took four months after handover to install the surveillance system. This poses a security risk: in the event that a safety incident occurs on Metrolinx property, video footage would not be available in investigating the incident.

On projects for the construction of multi-level parking garages, we noted that there is no requirement for a contractor to ensure that elevators are functioning prior to handing over the project. In one case, we noted that it took the contractor over a year after the garage had opened to install elevators. This inconveniences commuters—and particularly those who have difficulty or are unable to climb stairs.

On projects relating to the installation of fuelling or maintenance systems, we noted that there is no requirement for a contractor to provide training and

operating manuals before handing over a project. On one project where several complex systems were installed, we noted that it took the contractor two months after the facility was already in use to provide a complete set of training and operating manuals. Operating systems without manuals increases the risk that staff will operate them incorrectly or, in the event a system malfunctions, staff may not be able to resolve the problem.

RECOMMENDATION 11

To ensure that projects can be safely and successfully operated once substantially complete, Metrolinx should develop and implement the use of a substantial completion checklist requiring, at a minimum, that critical items needed to operate the project and ensure commuter safety have been completed or received prior to Metrolinx issuing a certificate of substantial completion.

METROLINX RESPONSE

Metrolinx agrees with the Auditor General's recommendation. Metrolinx has a standard form called a "Project Handover To Stakeholder at Substantial Completion" that is filled out by the contract administrator based on an onsite review of the project work. Metrolinx will enhance its current standard to be more comprehensive with respect to detailed items supporting operational readiness. This recommendation will be implemented immediately.

RECOMMENDATION 12

To ensure that performance issues with both design consultants and contractors can be effectively resolved during the project, Metrolinx should:

- issue mandatory work orders to compel consultants or contractors to complete work in the time frame and manner required by Metrolinx;
- implement a dispute-resolution process where claims filed by consultants or contractors (that dispute the costs associated with the work order) are reviewed by Metrolinx staff who are independent from the project team; and
- track the results of all claim reviews in a centralized system.

METROLINX RESPONSE

Metrolinx agrees with the Auditor General's recommendation and is currently working collaboratively with consultants, contractors, and legal counsel to develop a feasible, cost effective, and timely resolution to current and future performance issues. Metrolinx has the ability, under its contract, to issue mandatory work orders to compel the vendor to complete work within the necessary timeline and will enforce its right to issue these mandatory work orders in the future when it feels it is necessary.

Metrolinx will incorporate a dispute-resolution process whereby Metrolinx staff who are independent from the project team will review claims filed by consultants or contractors and will ensure the results of all reviews are tracked centrally. Although a centralized system is not in place, an interim solution has been initiated as of July 2016 to allow claims tracking in an Excel based log. Capital Projects Group staff are currently working on data collection and monthly updates to the log. The complete implementation of the interim solution is targeted for the end of 2016, with full implementation of the contract management system that incorporates the dispute-resolution reviews and their results, anticipated for the third quarter of 2017.

4.8 Limitations in the Accounting System Led to Metrolinx Making Payments to Contractors Beyond Projects' Approved Budgets

Metrolinx does not have a control in place that ensures that payments exceeding approved budgets have been approved for overexpenditure. Given that Metrolinx issues some $800 million a year in construction payments, one would expect that it would have basic automatic controls in place to ensure that only payments within budget are being made when authorization to exceed a budget is not in place. However, this is not the case.

The following illustrates typical internal controls for contract management in an accounting system. Bolded text indicates where these typical internal controls were lacking at Metrolinx:

1. When an organization hires a contractor, it establishes a budget for the project, setting out the maximum amount that is approved to be spent. One or more persons with sufficient authority approves the budget. (There may be a hierarchy of approval; for example, at Metrolinx, projects over $10 million must be approved by the Board of Directors.)
2. The project and its approved budget are entered into the organization's accounting system under a unique Purchase Order by staff in the procurement department.
3. As each invoice is received, project staff (who work for the organization) verify it, sign off on it, and code it with the correct Purchase Order. This is to ensure that payments can be tracked against the project's budget in the accounting system.
4. The invoice is submitted to the accounting department, which enters the payment amount and the Purchase Order number into the accounting system. **(This is not the case at Metrolinx. A system defect in the accounting system prevents the accounting department from entering the Purchase Order.)**
5. Before an invoice is paid, the accounting system ensures that there is sufficient money in the budget for that Purchase Order. **(This is not the case at Metrolinx. Without a Purchase Order entered into the system as pointed out in step 4, the accounting system cannot check whether there is sufficient money in the project's budget before paying the invoice.)**
6. If there is not enough money left in the budget, the accounting system will not allow for a cheque to be issued. Someone with sufficient authority must approve a budget increase before payment is made. This approval is an important element of internal control as it ensures that project budgets for multi-million-dollar projects are appropriately managed and overseen by people that are far removed from the project and have an independent perspective. **(This is not the case at Metrolinx. We noted that without any check to ensure payments are within budget as pointed out in step 3, the system issues payments regardless of whether the payment is under budget or will exceed the budget. Given that Metrolinx issues about $800 million in payments a year for construction projects, the fact that it does not follow this internal control practice is especially concerning.)**
7. When a project is completed, the Purchase Order is inactivated on the accounting system. No further invoices can be entered against this project. This prevents any unauthorized payments being made against a completed project. **(This is not the case at Metrolinx. There are several Purchase Orders that are still active in the accounting system even though the projects are completed.)**

Our audit identified the following instances where payments were made above the approved budgets. Although these payments were for services received, they were paid before budget increases were approved:

- In March 2013, Metrolinx paid the contractor on one multi-year project two payments totalling $1.2 million over the project's approved $17 million budget. Three years later, after a budget extension with the same contractor, the same problem occurred again. In April 2016, Metrolinx made three payments totalling $3.2 million over the approved budget. These payments were able to be made because the accounting system did not alert Metrolinx that the budget had been exceeded.
- In another instance, Metrolinx was not aware until we informed it that $100,000 had been paid over an approved budget.

In these instances, Metrolinx should not have issued a cheque until a budget extension was approved by someone with sufficient authority, as noted in step 6.

To determine the number of payments that were made without even being tracked against their assigned Purchase Orders, we asked Metrolinx for a listing of all payments made to all its construction contractors. We found that in the last five years, out of 7,300 payments Metrolinx made to these contractors, 4,600—or 63%—were made without being tracked against their assigned Purchase Orders in Metrolinx's accounting system.

Metrolinx informed us that, since its accounting system lacks the automatic controls of steps 5 and 6, it often relies on its project staff to manually track invoices and payments to ensure they do not exceed budgets. However, we found some significant drawbacks to this manual control approach that make it prone to error:

- On a typical project, staff in four different positions—the project co-ordinator, the project manager, the manager and the senior manager—have authority to approve invoices and submit them to the accounting department.
- Many projects last two or three years, during which time the initial project team is often totally replaced with new project staff—a normal practice at Metrolinx, with staff being reassigned to other projects. This makes it difficult to maintain consistency in the oversight of total project costs.

These problems are exacerbated when project staff incorrectly assume that the accounting system automatically performs control steps 5 and 6. We noted instances where project staff who were expected to manually track budgets did not realize that the accounting system was not equipped to inform them when a project budget had reached its approved limit.

As for step 7—automatically closing Purchase Orders when a project is complete—we noted that Metrolinx's external auditors have reported this risk to Metrolinx as far back as 2011. However, Metrolinx has not taken action to resolve the issue. At the time of our audit, unclosed Purchase Orders for completed budgets had remaining budgets of about $4 million.

RECOMMENDATION 13

To ensure that only authorized payments are made to contractors within approved or authorized increased budgets, Metrolinx should:

- correct its accounting system to ensure that it issues payment only for invoices up to the approved budget and Purchase Order limits;
- clarify and communicate to staff, who are responsible for manually tracking payments against project budgets, their roles and responsibilities on this regard;
- close out the Purchase Order numbers on all completed projects; and
- put a process in place to close out future Purchase Orders upon project completion.

METROLINX RESPONSE

Metrolinx agrees with the Auditor General's recommendation. An automated process was created in 2012 to close out Purchase Orders. However, after changes in the system were made, the process no longer functioned as designed. Metrolinx is in the process of implementing and upgrading the Accounts Payable

system. This will eliminate the defects noted in closing out purchase orders once projects are complete. System implementation and upgrades will be completed by September 2017. In the meantime, Metrolinx will manually review and close out all existing purchase order numbers on completed projects.

In addition, Metrolinx is implementing a contract management system that processes the invoices against approved budget and disallows payments that exceed the approved budget.

Data input and training on requirements and roles and responsibilities has begun on two rail corridors as of Fall 2016.

5.0 Detailed Audit Observations—CN and CP

As discussed in **Section 2.2.1**, Metrolinx and its predecessor, GO Transit, have been highly dependent on CN and CP. As the need for improved regional public transit increased in the 2000s, building more track for commuter trains became a government priority. To fulfil it, GO Transit and Metrolinx had to either purchase land from CN and CP or enter into agreements for the use of CN and CP land. In the latter case, CN and CP retained the exclusive right to build track improvements on the land they owned.

CN and CP have been in a very strong position when negotiating with GO Transit and Metrolinx because:

- GO Transit and Metrolinx had no alternative but to work with CN and CP (CN and CP have constituted a monopoly in this sense);
- CN and CP knew the volume of work that the Big Move plan would require over a number of years; and
- CN and CP knew how important improved transit was to the government.

Given this situation, it is incumbent on Metrolinx (and GO Transit before it) to find ways to spend taxpayers' and commuters' money prudently while also meeting the need for increased commuter rail capacity in the GTHA. Our audit findings indicate that Metrolinx has not done so.

We have concerns that Metrolinx has not managed its relationship with CN and CP in a way that is in the best financial interests of Ontarians. Specifically, Metrolinx has been weak in the following areas:

- Metrolinx pays CN and CP invoices without verifying if they are legitimate—or if the invoiced work has actually been done on Metrolinx projects rather than on other CN or CP projects (**Section 5.1**).
- Metrolinx does not verify the quality of materials CN and CP use in construction. This has enabled CN to use recycled materials in cases where Metrolinx expected and paid the cost of new materials (**Section 5.2**).
- Metrolinx pays CN and CP mark-up rates on construction costs that are significantly higher than the mark-up rates that can be considered to be industry benchmarks (**Section 5.3**).

5.1 Metrolinx Pays CN and CP Without Verifying Most Costs

On average, Metrolinx pays CN and CP about $145 million a year for the work they perform on the 20% of the track that GO Trains operate on. Metrolinx does not adequately verify—or does not verify at all—whether the costs CN and CP submit for this work are reasonable.

We discuss how this is the case for CN's "lump-sum projects" in **Section 5.1.1**. We discuss how this is the case for "time-and-materials projects" in **Section 5.1.2**. In **Section 5.1.3**, we discuss how project costs charged by CN are much higher than what other contractors charged on comparable projects. In **Section 5.1.4**, we discuss how Metrolinx does not obtain from CP the information it needs to analyze the reasonableness of CP costs.

5.1.1 Metrolinx Performs Limited Review of CN's Lump-Sum Project Cost Estimates

While Metrolinx has a process to ensure bids on non-CN projects are fair and reasonable, it does little to nothing to ensure the fairness and reasonableness of CN's lump-sum-project costs (see **Section 2.2.1** for details on lump-sum projects). Metrolinx simply pays these costs when they are invoiced. This means it pays:

- labour costs without knowing the hours of labour behind them (labour costs can amount to almost one-quarter of total project costs); and
- subcontractors' and transportation costs without knowing the construction plan behind them (subcontractors' and transportation costs can amount to almost a third of the total project cost).

In one instance for example, Metrolinx performed no review of the lump-sum cost CN estimated and charged for a $95-million project for a nine-mile track extension on the Lakeshore West corridor.

In another instance, we noted that Metrolinx attempted to analyze the reasonableness of a part of the lump-sum cost CN estimated and charged. It compared just the labour costs of this project to the labour costs of a similar non-CN railway project. It found that CN's labour costs were 130% higher than the other project's labour costs yet did not investigate why. The labour costs made up only about 30% of the overall $75-million cost of the CN project—Metrolinx did not analyze the remaining 70% of CN's costs.

Metrolinx Failed to Identify Unrelated Costs Included in CN's Lump-Sum-Project Costs

We noted one instance where, even though Metrolinx did not do any cost analysis of a particular project, it became aware after it had paid CN's invoices that some of the invoiced costs were not related to the project.

Specifically, CN charged Metrolinx to clean out track ballast on a railway track for CN freight trains that Metrolinx never uses (track ballast is the track bed, made up of gravel and other rocks; cleaning it out is a common maintenance activity done every three or four years, costing about $740,000 per mile).

There were other similar concerns brought forward in the past where CN's invoices contained amounts unrelated to the specific Metrolinx projects.

If Metrolinx reviewed such lump-sum costs and requested more detailed information, it could identify when costs potentially include amounts that are not part of a project (such as the maintenance costs incurred to clean track used only by CN), or costs that Metrolinx is not required to pay (such as cost overruns).

RECOMMENDATION 14

To ensure that the costs that Metrolinx pays CN are reasonable and relate only to contracted work, Metrolinx should obtain detailed information to support the lump sums CN estimates and charges and review it thoroughly. The information should include, but not be limited to:

- estimated labour hours, which Metrolinx should assess for reasonableness; and
- the construction plan, which Metrolinx should assess for the reasonableness of costs such as materials, transportation, subcontracted services and rented goods and services

METROLINX RESPONSE

Metrolinx agrees with the Auditor General's recommendation and will improve its review process for CN-related estimates and charges. Harmonized procedures are being implemented to provide a consistent and comprehensive review process that includes obtaining detailed information to support the reasonability of all construction estimates and charges, including CN.

5.1.2 Metrolinx Does Not Ensure that It Is Paying Only for Costs Actually Incurred on Its Projects

Just as Metrolinx does not know whether the costs it pays CN for lump-sum projects are reasonable, it does not ensure that the costs it pays CN and CP for all other projects were actually incurred. These other projects are time-and-materials projects (see **Section 2.2.2** for details on time-and-materials projects). As a result, we found cases similar to those described in the previous section, where Metrolinx paid CN and CP for costs not related to the contracted project.

For example, our review of a sample of CN invoices for the Lakeshore West GO Train expansion project between 2006 and 2008 found several that related to work CN did on track it owned that GO trains never use.

We were not able to obtain more recent invoices relating to work CN did for Metrolinx because Metrolinx did not ask CN to provide them. Although under its long-term agreement with CN, Metrolinx has the right to audit all CN invoices for a period of six months after they are issued, we found that Metrolinx has not done so.

We also noted Metrolinx has no process for verifying the charges on CN and CP invoices. Rather, Metrolinx simply ensures that actual costs do not surpass original construction estimates. Only rarely does Metrolinx review time-and-materials construction estimates for reasonableness, just as is the case for lump-sum projects.

Furthermore, if CN or CP's actual costs come in under the original estimate, CN or CP could still invoice Metrolinx up to the original estimate, even if the work is not done or is done for some other project. Metrolinx staff would not look into the possibility that the costs are not valid because the estimated cost was not exceeded.

In all projects we reviewed, CN and CP's actual costs were almost equal to the original estimates.

Metrolinx provides a substantial amount of funds for railway expansion on CN and CP land. Because Metrolinx is very dependent on CN and CP for use of their railways and building of the railways, an onsite inspector at CN and CP would provide a strong control that Metrolinx is only billed for services performed.

5.1.3 CN's Construction Charges Found to Be Higher than Other Railway Companies' Construction Charges

We compared the materials costs CN charged for projects in 2013 and 2014 to the materials costs charged by Metrolinx's rail parts supplier. We also compared the amount CN charged for labour to the amount charged by another rail contractor on a comparable non-CN project. These cost comparisons are shown in **Figure 7**.

CN charged significantly higher rates for both materials costs and labour costs.

5.1.4 Metrolinx Does Not Obtain the Information Needed to Determine Whether CP's Projects Are Competitively Priced

We noted that Metrolinx cannot determine whether CP projects are overpriced because CP does not provide any details or breakdown of its construction

Figure 7: Comparison of Amounts Paid by Metrolinx to CN vs. Another Rail Company

Source of data: Prepared by the Office of the Auditor General of Ontario based on information provided by Metrolinx

Type of Cost	Amount Charged by CN($)	Amount Charged by Another Rail Company ($)	Percentage by which CN's Price Was More Expensive (%)
Cost of materials used to construct one mile of railway track	1,500,000	950,000	**58**
Cost of labour to construct one mile of railway track	976,000	425,000	**130**

estimates. As shown in **Appendix 1**, CP's estimates for a project of almost $2 million can be as short as a two-page letter. The estimates specify only how much design will cost, how much construction will cost, and the total cost—with no further breakdown provided.

RECOMMENDATION 15

To ensure that Metrolinx pays only for Metrolinx construction costs actually incurred by CN and CP and that these costs are reasonable, Metrolinx should:

- obtain detailed invoices and follow a process to validate each item to ensure its reasonableness;
- for each project contracted for with CN and CP, assess the reasonableness of labour and materials costs;
- perform audits on CN invoices as allowed under the Metrolinx/CN long-term agreement;
- negotiate with CP to put in place the ability for Metrolinx to perform audits on CP invoices for all corridors, and perform the audits; and
- consider placing a Metrolinx inspector at sites where CN and CP are performing construction work for Metrolinx.

METROLINX RESPONSE

Metrolinx agrees with the Auditor General's recommendation and will continue to build on current practices to further mitigate the risks noted. Harmonized procedures are being developed to provide a consistent and comprehensive review of invoices, and will explicitly require invoices to be reviewed to ensure they correctly represent the status of the contract's progress and that charges are reasonable, including the reasonableness of labour and material costs.

Metrolinx will conduct periodic audits on CN invoices as allowed under its long-term contract and will negotiate with CP to incorporate the allowance of audits on CP invoices and ensure audits are conducted. The terms and conditions of any new agreement will be subject to negotiation with CN and CP, and will be subject to any applicable approvals (including Section 28 of the *Financial Administration Act*).

In addition, Metrolinx will assess if it places its own inspector on CN and CP construction sites or obtain a third party to complete quality assurance inspections throughout CN and CP projects.

5.2 Metrolinx Does Not Require Verification That CN and CP Have Used New Construction Materials When Projects Call For Them

The parts used in construction projects may be new or recycled. Recycled parts are generally safe and can be between 20% to 50% cheaper than new parts. Usually though, Metrolinx pays for and requires CN and CP to use only new parts.

To determine whether the parts used meet their specifications (are new when required) and have no defects, the railway under construction must be inspected. The inspection can be physical (a close look) or involve cameras or other technology.

Metrolinx informed us that its staff may sometimes visually inspect railways once they are built. However, we noted that such a process is not mandatory, nor are its results documented.

5.2.1 CN Installed Partially Worn Parts But Charged Metrolinx for New Parts

Metrolinx recently became aware that CN likely used recycled parts on a GO project but charged it for new parts. Since Metrolinx does not perform inspections nor maintain any inspection records, it asked CN to investigate this further. CN admitted this had in fact taken place—but, CN said, only to a very limited extent. According to CN, it had charged GO Transit for new rail instead of recycled rail for a 0.37-mile section of track on a Lakeshore West

expansion project. CN estimated the difference in cost to be only about $25,000.

CN indicated it was not aware of any other instances when it substituted recycled parts for new. However there were other similar concerns brought forward in the past.

RECOMMENDATION 16

To ensure that it receives the quality of material it pays for on all its construction projects, Metrolinx should implement an independent inspection process.

METROLINX RESPONSE

Metrolinx agrees with the Auditor General's recommendation. Where appropriate, third-party documented quality assurance inspections will be conducted throughout the project to ensure compliance of material quantities, quality and that the contractors are supplying materials within standards written in contract documents. This process will be implemented by April 2017.

5.3 Metrolinx Pays CN and CP Excessive Mark-Up Rates

All contracts with CN and CP are sole-sourced. Metrolinx's long-term master agreement with CN establishes the mark-ups rates CN can charge on top of labour and materials costs. These mark-up rates, or surcharges, are intended to cover those of CN's overhead costs that cannot be directly determined, such as railway administration costs. We found that these mark-up rates exceeded the normally accepted industry benchmark.

For our comparison, we used the rates published by the Canadian Transportation Agency (CTA). As **Figure 8** shows, CN's mark-up rates on labour and parts were considerably higher than those CTA suggests. We noted that Metrolinx has not renegotiated these high mark-up rates in recent years—it last amended them in 2003 as part of a restructure of its long-term agreement.

Unlike CN, CP does not have a long-term construction agreement with Metrolinx. Therefore, there is no set understanding between Metrolinx and CP as to how construction projects should be costed, and what mark-ups would be acceptable. We noted that CP disclosed its mark-up rates in only one of the projects we sampled, shown in **Figure 8**. In other projects we reviewed, Metrolinx does not know what CP's mark-up rates were as they were embedded in the total cost. This makes it difficult for Metrolinx to assess whether CP's costs are reasonable and fair, and whether the mark-up rates they charge are in line with industry standards.

Figure 8: CN and CP Mark-Up Rates Compared to Suggested Industry Mark-Up Rates[1]

Source of data: Metrolinx and the Canadian Transportation Agency

	Labour Costs	Costs of New Railway Parts	Costs of Old or Partially Worn Railway Parts
Suggested industry mark-up (%)	64	48	none established
Mark-up used by CN on all projects (%)	138	69	22
Difference	**+74**	**+21**	–
Suggested industry mark-up (%)	64	48	none established
Mark-up used by CP (%)[2]	96	50	none found in our sample
Difference	**+32**	**+2**	–

1. These comparator mark-up rates have been suggested by the Canadian Transportation Agency (CTA). The CTA's main responsibility is to facilitate issues related to railway crossings that arise between railway companies and utility companies, municipalities or landowners. Although the work that CN performs for Metrolinx is more varied than just railway crossings, Metrolinx informed us that constructing railway crossings is more complex than building straight track. Therefore, the mark-up rates suggested by the CTA are acceptable for use as an industry benchmark.
2. There are no established mark-up rates between Metrolinx and CP and costs received from CP do not typically specify mark-up rates. We nevertheless found that in only one of the CP projects we sampled, CP did specify the mark-up rates shown here.

RECOMMENDATION 17

To ensure that Metrolinx does not pay excessive construction costs to CN and CP, it should:

- renegotiate its long-term master agreement with CN so that mark-up rates are more in line with industry benchmarks; and
- negotiate an agreement with CP to ensure that estimates outline all costs in detail and that all mark-up rates are in line with industry benchmarks.

METROLINX RESPONSE

Metrolinx agrees with the Auditor General's recommendation and has initiated the renegotiation of the master construction agreement with CN to ensure that contractual terms remain current with industry and help to ensure value for money. The terms and conditions of any new agreement will be subject to negotiation with CN, and will be subject to any applicable approvals (including Section 28 of the *Financial Administration Act*).

A similar process to negotiate with CP to ensure that estimates outline all costs in detail and that terms remain current with industry will also be conducted.

Appendix 1: CP Estimate Approved by Metrolinx for $1.9 Million Project

Source of data: Metrolinx

CP

[redacted]

May 24, 2016

Metrolinx
50 Bay Street, Suite 1005
Toronto, Ontario
M5J 3A5

Attention: [redacted]

Re: Galt North Track Restoration – CP Dupont Signal Installation

Appended below is an estimate of the signal work costs that will be incurred by Canadian Pacific to support the Galt North Track restoration scheduled for 2016.

The following is a breakdown of the estimated costs for Canadian Pacific work including:

Mile 2.61 – Approach Signals 25 and 26
- Design, Material, Testing & Commissioning Labour

Mile 4.80 – Dupont
- Design, Material, Testing & Commissioning Labour

Mile 4.89 – West Toronto
- Design, Material, Field Construction Labour, Testing & Commissioning Labour

Design	
Signal Design (1)	$ 307,587
Material	
Signal Material (2)	$ 1,176,360
Construction	
Signal Construction (3)	$ 302,560
Testing & Commissioning	
Signal Testing & Commissioning (4)	$ 81,637
Grand Total	$ 1,871,164 plus taxes

(1) Signal Design includes internal design labour and external design services.
(2) Signal Material includes bungalow, switch machine, lights, cables, etc.
(3) Signal Construction includes internal construction and supervision resources and external contracted services such as directional boring and miscellaneous contracted services.
(4) Testing & Commissioning includes internal T&C labour.

This estimate does not include any design, material, or labour required to accommodate multiple phases of track construction.

This is an estimate only and actual costs incurred will be billed. The charges for signal work will be invoiced to Metrolinx with reference to Metrolinx' purchase order number.

Yours truly,

[redacted]

Canadian Pacific

Chapter 3
Section
3.10

Ministry of Transportation—Road Infrastructure Construction Contract Awarding and Oversight

1.0 Summary

The Ministry of Transportation (Ministry) is responsible for the construction and maintenance of provincial highway and bridge infrastructure, which is currently valued at $82 billion. It consists of about 40,000 km of highway lanes covering a distance of about 17,000 km, and almost 5,000 bridges and culverts.

The Ministry enters into construction contracts for work either to rehabilitate existing infrastructure in order to continue using it or to create new infrastructure to expand capacity. The road network, most of which was originally built by the 1990s, requires considerable ongoing maintenance. The Ministry expects to spend about $14 billion over the next 10 years for road and bridge rehabilitation and about $4 billion for road and bridge expansion.

In the past five years, the Ministry has awarded about 600 large construction contracts (greater than $1 million each) totalling about $5.5 billion. These contracts are for projects such as re-paving sections of highways, expanding highways, building new bridges or rehabilitating existing bridges. The average contract was valued at $9.1 million.

The Ministry also awarded about 1,450 minor construction contracts totalling about $580 million. Minor work usually involves less significant repairs on existing structures. The average value of these contracts was about $400,000.

The road construction industry in Ontario is mainly represented by two groups: the Ontario Road Builders' Association (ORBA) and the Ontario Hot Mix Producers Association (OHMPA). They consult with the Ministry on technical matters and lobby on behalf of their members' interests.

Our audit found that, in 2000, the Ministry began identifying significant problems throughout the province with pavement cracking years before it is expected to, resulting in increased cost to taxpayers for highways having to be repaired or repaved sooner than expected, and increased inconvenience and time lost for drivers due to more frequent road work. In 2004, the Ministry confirmed that poor quality asphalt cement was the primary cause of premature cracking. In 2007, two tests for assessing the quality of asphalt and the likelihood of it cracking prematurely were developed; however, at the time of our audit, the Ministry had fully implemented only one of them—five years after it was developed—and was using the second on only a limited number of projects. This is the case because

over the years, the Ministry decided not to implement all the tests due to multiple requests from the asphalt industry to not implement them.

Similarly, in response to requests from construction contractors who belong to ORBA, the Ministry made significant policy changes that benefit the contractors over taxpayers' best interests.

The Ministry has also paid bonuses to contractors after it became aware that contractors may have tampered with samples, substituting good samples for testing in place of the actual asphalt used. As well, the Ministry has paid for costs to repair roads that should have been covered under contractors' warranties. Although the Ministry works with contractors to change their behaviour through discussions and improvement plans, it rarely penalizes poorly performing contractors, including contractors that breach safety regulations, and allows them to continue to bid on and be awarded future contracts.

We also noted that it is the contractors, not the Ministry, that hire the professional engineers responsible for certifying that construction of structures (such as bridges) adheres to required standards. A few of these engineers have certified that construction, that was subsequently found to be unsafe, was in compliance with the standards.

Some specific observations in this audit include:

- **Premature cracks in highways have significantly increased Ministry's highway-repair costs.** We identified highway projects in all regions of the province where pavements had to be fixed for cracks much earlier than their expected life of 15 years—and some as early as only one year after the highway was open to the public. Sufficient documentation is not available for us to determine the full extent of this issue and the total additional cost paid by the Ministry to repair pavement because of premature cracking. However, we were able to examine five highway projects where all repair costs incurred because of premature cracking were tracked; we noted that the Ministry paid $23 million to repair these highways on top of the $143 million originally paid to pave them. The highways had to be repaired just one to three years after the pavement was laid.
- **Ministry delayed implementing tests to identify asphalt likely to crack prematurely.** The Ministry extensively studied two tests that would allow it to detect, before asphalt was laid, whether pavement is likely to crack early—both tests are required in combination to understand if pavement will in fact crack early. But rather than implementing these new tests as soon as they were validated in 2007, the Ministry waited five years to implement one of them—and still has not implemented the other one across all contracts nine years later. When we asked why action was not taken sooner, the Ministry informed us that instead of a traditional client/supplier relationship between the Ministry and its contractors and suppliers, its approach is to work "collaboratively" with the industry. Thus, decisions such as implementing these tests were discussed and determined through a Joint Pavement Committee made up of OHMPA and Ministry staff and, in essence, allowed the Ministry's suppliers to determine the quality of materials they would supply, even though premature cracking would result in additional revenue for the industry as a whole and incur additional costs for taxpayers.
- **Ministry pays contractors bonuses for meeting the requirements of the contract, something contractors are always expected to do.** In 2012, the Ministry paid contractors about $8.8 million in bonuses for providing the quality of asphalt specified in contracts. It has continued to pay roughly the same amount of bonuses since then (although in 2013 it stopped tracking the amounts paid). However:
  - The Ministry has been aware since 2000 of quality issues surrounding asphalt, and

had neither addressed its concerns about premature cracking in a timely manner, nor changed its bonus-payment practices.

- Contractors have the opportunity to tamper with asphalt samples to obtain bonuses. The Ministry was aware of sample-switching but has neither investigated it to impose fines nor implemented controls to ensure that sample-switching does not occur.

- **Ministry policies changed to benefit the Ontario Road Builders' Association (contractors' association).** Although it is rare throughout the provincial government for ministries' internal audit reports to be shared with outside parties (unless a request is made through the *Freedom of Information and Protection of Privacy Act*), the Ministry shared with ORBA an internal audit report of a review of its construction contracts program. ORBA requested to review the report's recommendations with the Ministry, so the Ministry established a joint policy committee of ORBA and Ministry representatives to review the report. Ministry staff had concerns with the establishment of this committee because it would allow ORBA to strongly influence how the report's recommendations should be implemented, which was an internal operational matter. The Ministry decided against staff's recommendations and created a joint policy committee comprised of six ORBA members (five of which are contractors) and six government representatives (only three from the Ministry of Transportation, with one other from the Ministry of Infrastructure, one from Infrastructure Ontario, and one from the Ministry of Finance). Moreover, the Ministry decided that rather than working on implementing recommendations made by Internal Audit, the joint policy committee would focus on addressing an action plan document created by ORBA and its recommendations. We noted that ORBA's action plan, not unexpectedly, was in the best interests of its members.

Through this process, and because of multiple requests made by ORBA prior to it, ORBA influenced internal Ministry policy in its favour, including the following:

- **A Ministry policy changed to allow contractors to delay paying fines; some fines are now uncollectible.** Prior to 2011, contractors had to pay liquidated damages (late fines) right away when they were late delivering on projects. However, the Ministry agreed to a change in its policy to allow contractors to delay paying fines if the contractor wanted to contest the fine. We noted that other provinces such as Alberta, British Columbia and Quebec collect fines immediately, then issue a refund if the dispute is resolved in the contractors' favour. With this change in policy, contractors have been able to postpone paying a total of about $6 million in fines for up to four years. During these four years, two contractors went bankrupt; the Ministry will never be able to collect the $660,000 in late fines they owed.

- **New policy no longer discourages litigious contractors from repeatedly suing the Ministry.** Prior to 2015, the Ministry could prohibit contractors that filed multiple lawsuits that it deemed to be frivolous from bidding on future contracts. Lawsuits considerably add to the workload of Ministry staff and to legal costs for the Ministry. Upon the industry's requests, the Ministry removed a contract clause in 2015 that had given the Ministry the ability to exclude litigious contractors from bidding on future contracts. Ministry records show that between 2007 and 2015, contractors filed 12 lawsuits. Prior to 2007, lawsuits were virtually non-existent. The new policy change may contribute to even more lawsuits.

- **The Ministry changed its dispute-resolution policy, providing incentive**

for contractors to dispute more often. In the Ministry's original dispute-resolution process, a contractor wishing to make a claim against the Ministry had to escalate the claim through three levels within the Ministry before launching legal action. This process worked well given that about 95% of disputes were successfully resolved through this process. However, upon the industry's request, the Ministry agreed in 2016 to change the process, allowing contractors to ask for a third-party referee to be involved at any level of the dispute process. There is a risk that referees may make middle-ground decisions instead of strictly applying the terms of the contract. This may create an incentive for contractors to file more claims and go directly to a referee.

- **Engineers who certify structures are built correctly are hired by the contractor, and have provided false certifications.** One of the most important quality-control measures in building public infrastructure is to have sufficient oversight by a professional engineer to verify and provide certification that key construction activities are performed to the appropriate standards. Given the nature and importance of their work, the Quality Verification Engineers (QVEs) who perform this work should be independent from the contractors whose work they are reviewing—but, in fact, we found that they are hired by, work for and report directly to the contractors. We noted that Ministry regional staff had identified instances across the province where QVEs provided erroneous or misleading conformance reports to the Ministry. The Ministry also relies on its contract administrators and quality assurance staff to provide oversight, but a sign-off by the QVE provides assurance to the Ministry that a structure will be safe for public use and that specifications have been met.
- **The Ministry is lenient in managing poorly performing contractors.** The Ministry does not effectively penalize contractors that have serious performance issues, and allows them to bid on future contracts. Contractors that have received unsatisfactory ratings are allowed to continue to bid on and have been awarded significant amounts of work for the Ministry. For instance, three contractors that have consistently received an unsatisfactory rating for several years because of their poor performance were awarded construction contracts worth about $45 million each over the last five years—for a total of about $135 million. As well, the Ministry has paid to repair the contractors' substandard work even when the work was to be covered by the contractor's warranty.
- **The Ministry awards new projects to contractors that have breached safety regulations.** The Ministry can penalize contractors that perform unsafe work; in practice, this rarely happens. Rather than imposing monetary fines for unsafe work, the Ministry's penalty process is intended to reduce the amount of future work a contractor can bid on. However, we noted that in seven such infractions we examined, none of the penalties were large enough to prevent contractors from bidding on Ministry projects. This is because the ceiling amount (the maximum amount a contractor can bid on for a contract) is not reduced enough by the penalty to impact any future bids by the contractor. Also, a smaller contractor that had breached safety regulations was banned from bidding on future contracts in one of the Ministry's regions but was still awarded work in other regions. In addition to these penalties, the Ministry also works with contractors to change their behaviour through discussions and improvement plans.

This report contains seven recommendations with 16 action items.

OVERALL MINISTRY RESPONSE

The Ministry appreciates the Auditor General's observations and recommendations. Building and maintaining the provincial highway network is key to moving both people and goods efficiently and safely across the province. These investments also ensure that the infrastructure is in place to meet the transportation needs of a growing population.

With a mandate to keep Ontario's highways and bridges in good repair, reduce congestion, improve safety and support the economy, the Ministry takes its responsibilities very seriously.

Over the past five years, more than 689 lane-kilometres of new highway and 58 new bridges have been built across Ontario. In addition, more than 4,848 centreline-kilometres of pavement and 592 bridges have been rehabilitated.

The Ministry continues to take the position that ongoing dialogue and consultation with stakeholders, including the contractors who work on our projects and their industry organizations, helps inform the Ministry's decisions about policies and programs and is critical to the successful implementation of our infrastructure programs.

The safety of the travelling public and those who work on our projects, construction quality and fiscal responsibility remain top priorities for the Ministry. Although the Ministry has a long history of well-established and adhered to policies and procedures for the procurement and administration of our construction contracts, the Ministry strives for continuous improvement in all of its programs. Over the coming months, the Ministry will be carefully reviewing the audit's findings and recommendations and will develop an Action Plan that addresses the Auditor General's observations and recommendations for the awarding and oversight of construction contracts.

2.0 Background

2.1 Overview of Provincial Transportation Infrastructure

The Province's transportation infrastructure is made up of road infrastructure and public-transit infrastructure, both falling under the responsibility of the Ministry of Transportation (Ministry). (Municipalities have their own road and public-transit infrastructure for which the Ministry is not responsible.)

Ontario's road infrastructure is currently valued at $82 billion. It consists of about 40,000 km of highway lanes covering a distance of about 17,000 km, and almost 5,000 bridges and culverts.

Ontario's public transit infrastructure is currently valued at $11 billion. Operated by Metrolinx, which is an agency of the Ministry, it consists of a network of train and bus routes serving an area of more than 11,000 square kilometres in the Greater Toronto and Hamilton Area (GTHA).

The Ministry enters into construction contracts for work either to rehabilitate existing transportation infrastructure in order to continue using it or to create new infrastructure that will expand the network. In the next two sections, we discuss the magnitude of both types of construction work in Ontario.

2.1.1 Construction Work Performed to Rehabilitate Existing Infrastructure

Most of the Province's existing transportation infrastructure was originally built by the 1990s. Therefore, construction work in the 2000s has mainly focused on rehabilitation rather than building new infrastructure.

Bridges, stations and other large structures are built with the intention that they will last about 75 years. However, they do require regular maintenance and rehabilitation in order to continue to be used. For example, highway pavement is

expected to last about 15 years before requiring new pavement. The quality of this work will affect whether the road will need repair work, such as the sealing of premature cracks, before the pavement is replaced again.

As shown in **Figure 1**, the Ministry expects that road construction work will cost about $18 billion for the next 10 years. Of this, $14 billion will be for road rehabilitation versus $4 billion for road expansion. This is because the road network, which is already mature, requires considerable ongoing maintenance and rehabilitation. For example, one out of every five bridges and culverts in Ontario is in poor condition and needs to be rehabilitated over the next five years.

2.1.2 Major Construction Work Planned to Expand Province's Transportation Network

In 2008, the government announced its 25-year "Big Move" plan (also known as the Regional Transportation Plan) to make huge upgrades to Ontario's existing transportation infrastructure. The government identified that traffic congestion alone costs $11 billion annually, and that Ontario's population would grow by about 40% in the next 25 years.

The Big Move plan is the single biggest wave of investment to build new infrastructure since the time these systems were initially built. A sizeable investment is being made to upgrade Ontario's public transit network to help with traffic congestion. For example, train frequency on each line travelling to and from downtown Toronto is expected to increase to every 15 minutes in the daytime on weekdays. Outside the downtown core, light rail transit is being built in Toronto, Mississauga and Brampton.

Upgrades are also being made to Ontario's road infrastructure. Highways within the GTA are being widened and car pool lanes will be expanded. Outside of the GTA, there are also plans to widen some highways, such as ones connecting Kitchener and Guelph.

Figure 1: Planned Spending to Rehabilitate and Expand Ontario's Transportation Infrastructure, 2016/17–2025/26

Source of data: Ministry of Transportation and Metrolinx

Type of Infrastructure	Planned Spending to Rehabilitate Existing Infrastructure ($ billion)	Planned Spending to Build New Infrastructure ($ billion)	Total ($ billion)
Highways and bridges	14	4	18
Public transit	3	27	30
Total	**17**	**31**	**48**

Significantly more money is allocated for expansion over the next 10 years than in previous years. As **Figure 1** indicates, the Ministry expects that building new transportation infrastructure will cost about $31 billion over the next 10 years.

2.2 Overview of Asphalt, the Asphalt Industry and Construction Contractors

2.2.1 Asphalt Is Critical in the Construction of Highways

At least 2.6 million tonnes of asphalt are laid on Ontario's highways each year, costing the Province about $270 million annually. Asphalt laid on highways is a mixture of aggregate, which is essentially rock in various forms (such as crushed stone, gravel and sand), and asphalt cement, which is the "glue" or binding agent that holds the aggregate together. (See **Figure 2**, How Asphalt Is Produced.) Asphalt is about 95% aggregate and 5% asphalt cement. As a by-product of the refining of petroleum crude oil, asphalt cement is what remains after gasoline, kerosene, fuel oil and other products have been distilled from petroleum. In recent years, as the technology for extracting products such as gasoline from petroleum has improved, the asphalt cement remaining at the end of the process has become

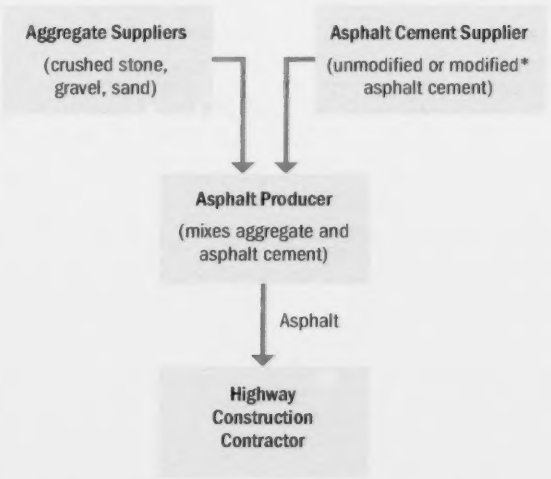
less adhesive than it used to be. This is one reason that asphalt cement suppliers have used other substances, such as recycled engine oil, as additives to asphalt cement.

The Ministry has approved 11 asphalt cement suppliers and 28 aggregate suppliers whose cement and aggregate, respectively, can be used on construction projects for highways that have high traffic volumes (in **Section 2.5** we discuss how suppliers can be approved to provide material for use on the Ministry's construction projects). For highways that have low traffic volumes, the Ministry requires that asphalt cement be supplied by the 11 asphalt cement suppliers, however the aggregate can be supplied by unapproved aggregate suppliers as well.

As **Figure 2** shows, asphalt producers purchase asphalt cement from one of the 11 approved suppliers (four of which are also Ontario construction contractors), and mix it with aggregate from any one of the aggregate suppliers to produce the asphalt we see on highways. Thus, a contractor working on provincial highways should be assured that the asphalt it purchases from one of these asphalt producers meets the Ministry's requirements.

Having an optimum mix of aggregates and high-quality asphalt cement is important in ensuring that highways will last their expected life of 15 years with little to no cracks. Concerns about asphalt starting to crack and rut prematurely (rutting is when the weight of a car leaves a depression in the road) were widespread enough in the 1980s that the United States government spent $150 million to study and develop a new way of creating asphalt. The outcome of this study was "SuperPave"—the combination of an Aggregate Mix Design Process and performance-graded asphalt cement. SuperPave became the industry norm throughout North America. In 1996, the Ministry began implementing SuperPave, resulting in a significant improvement in pavement quality—most notably, the elimination of rutting. SuperPave allowed the Ministry to accurately define the right combination of aggregates and asphalt cement that would be optimal for the traffic and climate conditions a road would be exposed to.

Figure 2: How Asphalt Is Produced
Prepared by the Office of the Auditor General of Ontario



* In some cases, asphalt cement suppliers add recycled engine oil to unmodified asphalt cement—a petroleum product—creating a modified asphalt cement they supply to asphalt producers.

2.2.2 Stakeholders in the Road Building Industry

Ontario's road construction industry is mainly represented by two groups: the Ontario Road Builders' Association (ORBA) and the Ontario Hot Mix Producers Association (OHMPA). They are key players in providing technical input that helps shape the decisions made by the Ministry. Although the two groups represent different types of stakeholders, members can sometimes overlap as some contractors have multiple business interests. 30,000 highway construction workers—the vast majority of such workers in Ontario—are employed by the contractors and suppliers that are members of ORBA and OHMPA.

Ontario Road Builders' Association

Established in 1927, ORBA currently represents over 80 contractors that build roads and bridges in Ontario. Its goal is to advocate on issues that matter to the industry and to provide opinions on technical matters. ORBA also collaborates extensively with the Ministry. For over 20 years, ORBA representatives have served on joint committees established by the Ministry. In recent years, ORBA has been represented on three separate joint committees that decide when and how to implement new road-quality standards related to the quality of asphalt, the proper construction of bridges, and the environmental impact of construction. ORBA is also represented on a joint committee with the Ministry that discusses policies for construction administration and oversight.

ORBA is a registered lobbyist in Ontario, meaning that it can lobby for its interests with government ministers and public-sector employees. Annually, ORBA hosts a convention that is attended by the construction industry along with the Minister of Transportation and a number of Ministry staff. The focus of the convention is to recognize significant achievements and advancements made over the year, and to strengthen ORBA's relationship with the Ministry. In 2014, ORBA also started hosting annual informational events at Queen's Park, which have been attended by the Minister and other MPPs.

Ontario Hot Mix Producers Association

OHMPA represents 49 hot mix (asphalt) producers and five out of the 11 Ministry-approved asphalt cement suppliers that produce the asphalt that construction contractors use on Ontario's highways. (The remaining six approved asphalt cement suppliers do not belong to OHMPA because they are located outside of Ontario). One of OHMPA's main goals is to gather technical information about asphalt quality from various jurisdictions. It also aims to better educate people who work within the asphalt industry.

Although it was established in 1974, in recent years OHMPA has begun to work closer with the Ministry. OHMPA representatives now serve on joint committees specifically created by the Ministry to tackle technical problems related to asphalt. Currently, there are three active joint committees of OHMPA and the Ministry; they provide input on technical matters such as the production of high-quality asphalt and high-quality asphalt cement, and how new technologies can be used in assessing pavement performance.

2.3 Evolution of Projects at the Ministry

In the past five years, the Ministry has awarded about 600 large transportation construction contracts (greater than $1 million each) totalling about $5.5 billion. These contracts are for projects such as re-paving sections of highways, expanding highways, building new bridges or rehabilitating existing bridges. The average contract is valued at $9.1 million. These contracts are tendered through the Ministry's central procurement department.

In addition to large construction projects, during that period, the Ministry has awarded about 1,450 minor construction contracts totalling about $580 million. Minor work usually involves simple repairs on existing structures. The average value of these contracts is about $400,000. These contracts are awarded and administered by Ministry regional offices, and work is usually done by small local contractors.

As **Figure 3** shows, in the last five years, 10 contractors accounted for 73% of all construction work awarded by the Ministry—about $4.4 billion out of $6.1 billion.

In keeping with industry norms, the Ministry structures almost all of its projects using either of two delivery models:

- **Traditional** (also known as design/bid/build)—the Ministry contracts with separate entities for the design and then construction of a project based on the design; or

Figure 3: Value of Contracts Awarded to Top 10 Contractors vs. Other Contractors, 2010/11–2015/16
Source of data: Ministry of Transportation

Contractor	Total Value of Contracts Awarded ($ million)	% of $6.1 Billion in Total that Ministry Awarded to Contractors
Miller Group Inc.*	963	16
Dufferin Construction Company*	866	14
Aecon Construction and Materials Limited*	738	12
Coco Paving Inc.*	402	7
Pioneer Construction Inc.	345	6
Teranorth Construction & Engineering Limited	318	5
J&P Leveque Bros. Haulage Limited	271	4
R.W. Tomlinson Limited	186	3
Bot Construction Limited	175	3
Cruickshank Construction Limited	163	3
Subtotal	**4,427**	**73**
Other	1,653	27
Total	**6,080**	**100**

* Asphalt cement supplier.

- **Fixed-Price Contract** (also known as design-and-build)—the Ministry hires a single entity to perform both the design and construction phases.

Under the traditional model, where the construction contractor is not responsible for the design, the Ministry retains more control and risk of cost overruns. Under the design-and-build model, the Ministry transfers a significant amount of control and risk of cost overruns to the contractor.

2.3.1 Much Work Performed In-House at Ministry—Before 1996

Until the 1950s, the Ministry performed all design, some construction and all oversight work on road construction projects itself. In the 1950s, it began outsourcing construction work to contractors, but continued to perform its own design and oversight work in-house. This meant that Ministry staff monitored construction activities to ensure that work was performed according to the project's design. They also performed materials testing in-house to ensure that construction materials and workmanship were of an acceptable quality.

Most road infrastructure in the province—about 80% of the bridges we see today and about 90% of highways—was built by 1996 under this model.

2.3.2 Movement to Full Outsourcing—1996 to Present

In 1996, in response to provincial government direction to reduce operational costs and staffing levels, the Ministry commenced the process of completely outsourcing the oversight of construction projects. This meant that most design, testing and contract oversight would begin to be outsourced. This decision was approved by the Management Board of Cabinet with a goal of reducing overall staffing levels in the government.

Projects began to be designed mostly by external consultants who were qualified professional engineers. The Ministry shut down its testing laboratories and outsourced materials testing to certified labs. The Ministry also began outsourcing oversight responsibilities to external consultants as well.

The main objective was to reduce staffing; as a result, many staff were either let go or re-assigned to different priorities.

2.3.3 Continued Outsourcing with the Introduction of Design-and-Build Model and Performance Specifications—2008 to Present

The fully outsourced work that began to be rolled out in 1996 followed the traditional model whereby: the design work was outsourced to consultants, after which construction contractors would bid and complete the work, and consultants again would provide oversight.

In 2008, the Ministry started exploring using the design-and-build model that it hoped would further reduce costs and speed up delivery of projects. Under design-and-build, the Ministry would also establish "performance specifications" that focus on the expected outcome of the work rather than on how that outcome is supposed to be achieved. For example, performance specifications might dictate that seven years after a highway construction job is completed, there should be little to no long cracks running deeply in the asphalt. The steps to be taken to achieve this—which would be prescribed in traditional contracts—are left up to the contractor to decide. Under this model, the contractor generally assumes greater risk because it is bidding on a project before the project has actually been designed; therefore, costs are difficult to estimate with this approach. The Ministry's risk is somewhat postponed: it depends on warranties from the contractor that the end-product will still be performing as intended at some future defined date.

The first design-build project was tendered in 2010. Since it required limited oversight, the Ministry did not need to hire expensive consultants for contract oversight. They performed the limited oversight internally through regional staff. This also allowed them to better understand the new model. By 2016, about 10% of all rehabilitation projects were design-and-build projects.

At the same time, the Ministry also started requiring extended warranties in some of its contracts for items such as asphalt. Generally, construction work comes with a standard one-year warranty. However, in projects with performance specifications, extended warranties are important to the Ministry because they can motivate the contractor to make good design and construction decisions so that the end structure will last long enough that the contractor does not have to perform work under the warranty. Warranties ranging from three years to seven years were phased in to some degree during this period.

By 2015, the Ministry's approximately 900 engineering staff had been reduced to just under 700, and about 760 contract administration staff to about 150.

2.4 Ministry's Procurement Process for Construction Contracts

The Ministry's process for procuring contractors for construction projects consists of five steps:

1. Contractors submit documents that demonstrate they have relevant construction experience, are in good financial health, free of conflict of interest, and tax compliant. They also provide references of prior construction work. The Ministry reviews this information and determines if contractors are eligible to bid. If eligible, a contractor receives a unique contractor ID number, which is also tied to any subsidiaries associated with them.
2. When a construction project is determined, the Ministry publicly advertises the project on its Registry, Appraisal and Qualification System (RAQS/MERX, described below). A deadline for when a contractor can submit bid prices is also posted.
3. The system automatically closes the tender on the bid submission deadline—this prevents the system from accepting new bids. All bid prices are published publicly on the system's

site for transparency. The three lowest bidders are notified to submit a more detailed itemized bid within 24 hours.

4. Ministry staff evaluate the detailed itemized submissions and ensure the bids meet all the requirements.
5. The lowest bidder in compliance with project requirements is awarded the contract.

RAQS/MERX is a secured online tendering system that automatically checks contractors' eligibility to bid, accepts and processes bids submitted by contractors within the tendering period, and rejects late bids. The system secures the contractors' submitted bids and ensures that no one can access the system to tamper the bid, including the bid price or company name.

2.5 Ministry's Approval Process for Asphalt Cement Suppliers

A supplier who wants to provide asphalt cement for Ministry construction projects can approach the Ministry at any time. The Ministry inspects the supplier's facilities to ensure that the supplier has appropriate quality control processes. The Ministry also visually inspects the asphalt cement, obtains samples and tests them to ensure they meet pre-approval specifications.

If the sampled asphalt cement passes the tests, the supplier's cement is added to the Ministry's approved materials list, known as the Designated Sources of Material. Approved materials can be purchased by asphalt producers, who mix the cement and aggregate to produce the asphalt that is used on roads.

During construction, the contractor has to ensure that it maintains sufficient documentation to prove to the Ministry that only designated asphalt cement has been used on the roads. Once the cement is used to create asphalt, the Ministry repeats the pre-approval tests just to ensure that the cement is of the same specification it approved for use (these pre-approval tests do not test for risk of premature cracking).

3.0 Audit Objective and Scope

Our audit objective with respect to construction projects in the transportation sector was to assess whether the Ministry of Transportation had effective policies and procedures in place to ensure that:

- contractors were selected in a competitive, fair, open and transparent manner that resulted in contracts being awarded to qualified bidders only, with due regard for economy;
- there was sufficient oversight of the contractors during construction; and
- final construction resulted in a high-quality asset that meets the needs of Ontarians.

Prior to commencing our work, we identified the audit criteria we would use to address our audit objective. Senior management at the Ministry agreed to our audit objective and criteria. Our audit work was primarily conducted between December 2015 and July 2016.

In conducting our work, we met with key personnel at the Ministry's head office in St. Catharines, and spoke to staff at all five of the Ministry's regional offices (Kingston, London, North Bay, Thunder Bay and Toronto) where the oversight of construction contracts takes place. We interviewed staff involved in procurement, administration and oversight of construction contracts, and examined related data and documentation (focusing on the most recent five years, between 2011 and 2016), including Ministry reports on the quality of construction work done by contractors. We performed research on construction contract administration in other jurisdictions—specifically the administration of late fines.

We also met with Ministry staff involved in the research and development of asphalt standards and testing requirements; and examined related data and documentation, including research they conducted on poor-performing pavements. We met with a professor at Queen's University (who has

been performing research on asphalt and asphalt quality since the 1990s) to understand how proper testing can aid the Ministry in predicting whether roads will crack early. We also contacted representatives from municipalities and met with the 407 ETR privatized highway company to find comparisons to Ontario's asphalt standards and testing requirements. Also, we met with ORBA and OHMPA to obtain their perspectives on the challenges they face in delivering construction contracts. As well, we reviewed the meeting minutes of the committee of the Ministry and ORBA that dealt with policy matters, and the committees between the Ministry and OHMPA that dealt with position papers related to asphalt issues.

Our audit also included a review of relevant audit reports issued by the Province's Internal Audit Division. These reports, the most recent of which was issued in October 2015, were helpful in determining the scope and extent of our audit work.

4.0 Detailed Audit Observations

4.1 Poor-Quality Asphalt Contributes to Additional Costs to Taxpayers for Repairs and Inconvenienced Drivers

Our audit found that the Province has a significant problem with pavement cracking years before it is supposed to. This results in increased cost to taxpayers for highways being repaired or repaved prematurely, and increased inconvenience and time lost for drivers forced to endure frequent road construction. The Ministry of Transportation (Ministry) has known since 2004 that pavement is cracking prematurely because poor-quality asphalt cement that cannot adequately withstand winter conditions in Ontario was being supplied and used on highways. Yet, as discussed in **Section 4.2.1**, it has repeatedly accommodated the asphalt industry's requests to delay implementing two new tests the Ministry validated in 2007, that could be used to ensure that the industry supplies higher-quality asphalt cement.

Is the overall condition of Ontario's highways deteriorating? Although the Ministry's Pavement Condition Index (Index) suggests that pavement conditions are getting better, it does not accurately reflect road conditions. The Index indicates that pavement quality has improved by 8% over the last ten years, but this measure does not track how many cracks have occurred and whether they did so within a reasonable period of time.

The Index measures the smoothness of the road, meaning that if it was cracked and repaired, the Index would measure it as okay—but it would not measure whether the pavement performed poorly and cracked prematurely.

Once cracks are filled, the Index records the condition of the road as being good. It does not indicate if expensive repair work was needed long before the anticipated life expectancy of the pavement was reached. If the Ministry tracked more variables, the Index would likely paint a worse picture of the condition of Ontario's highways.

Ministry staff at each regional office have identified concerns about the lifecycles of their highways being reduced significantly in recent years. Engineers in one Ministry region tracked, documented and were able to provide us details on sections of highways requiring repairs and replacement. They confirmed to us that the lifecycle of many highways in that region had been reduced by between 50% and 60% from the normal lifecycle of 15 years (see **Figure 4** for examples of highways that needed early replacement). Although the Ministry plans and budgets for highways to have an average life expectancy of 15 years before they need to be completely removed and repaved, we noted numerous instances where sections of highways needed to be replaced many years earlier (**Section 4.4.2** discusses the additional costs incurred by the Ministry because of this).

Figure 4: Reduced Age of Specific Sections of Highways in Ministry's Central Region
Source of data: Ministry of Transportation

Highway	Age of Highway Section When Replacement Required (Years)
A 10-km section of Highway 403 completed in 2006	5
A 15-km section of Highway 12 completed in 2007	8
A 7-km section of Highway 400 completed in 2009	6
A 9-km section of Highway 10 completed in 2009	8
A 10-km section of Highway 400 completed in 2010	5
An 8-km section of Highway 403 completed in 2010	6

Figure 5: Comparison of Good-Performing Pavement and Poor-Performing Pavement
Source of data: Ministry of Transportation

13-year-old highway performing as expected, in Petawawa, Ontario.

Six-year-old highway with premature cracks, in Coldwater, Ontario.

4.1.1 Ministry Allowed Asphalt Industry to Use Poor-Quality Cement in Making Asphalt

As discussed in **Section 2.2.1**, the Ministry's introduction of SuperPave in 1996 resulted in significant improvement in pavement quality; in particular, rutting was essentially eliminated. However, there continued to be problems with cracking even after the introduction of SuperPave. The Ministry noticed that roads had begun cracking in all directions, as opposed to mainly horizontal cracks prior to SuperPave. Even more significantly, pavements were cracking long before they were supposed to. As discussed in **Section 4.1.2**, premature cracks add millions to the Ministry's highway-repair costs. (**Figure 5** shows premature cracking versus what asphalt should look like when performing as expected.) In this section, we discuss what was causing these cracks.

Starting in 2000, Ministry experts, including engineers, studied nine highway pavement jobs that had premature cracking. Whereas these highways should not have experienced much cracking earlier than 15 years, the Ministry noted cracks as early as four years. Some examples include:

- Within four years, an 11-km section of Highway 41 in south-eastern Ontario had 66 km of cracks running through it.
- Within five years, a 13-km section of Highway 7 in south-eastern Ontario had 131 km of cracks running through it.
- Within six years, a section of Highway 62 in eastern Ontario had about 13,000 cracks.

Premature cracking similar to these examples was found in all regions of the province.

Working alongside external experts in the field, the Ministry ran field trials, retested asphalt and came to the conclusion that the problem resided with how the asphalt industry was creating "performance-graded asphalt cement." (SuperPave's Aggregate Mix Design process and the construction of the foundation of the road, or road beds, were not the problem). The asphalt industry, specifically the asphalt cement suppliers, were adding cheaper materials, notably excessive amounts of recycled engine oil, into the cement they supplied for use on Ministry projects. The suppliers' cement was still able to pass the SuperPave tests used by the Ministry even when the cement contained large amounts of recycled engine oil. Unmodified asphalt cement costs about $540/tonne, whereas recycled engine oil, which is basically used car engine oil, is a waste product that costs very little to acquire. Thus, it was very profitable for the asphalt industry to mix almost-free recycled engine oil into asphalt cement. (Since the Ministry deals directly only with contractors in its procurements, and not with asphalt cement suppliers, it has no way of knowing whether cheaper materials bought by the contractor result in savings to the Ministry through lower bid prices).

The use of recycled engine oil in itself does not cause premature cracks and reduce the life of highway pavements; rather, it is excessive use of this material that causes premature cracks. In colder climates like Ontario's in winter, excessive amounts of recycled engine oil greatly reduces the life of a highway because it becomes hard and brittle in colder winter temperatures. Therefore, after a winter or two, pavement with excessive recycled engine oil will show a large number of cracks that should not occur for some 12 to 18 years.

Ministry staff informed us that it wanted to implement tests that would predict whether pavement would crack prematurely regardless of whether recycled engine oil was added or not. This is because implementing better tests that could cover a range of additives was seen as a better long-term solution. The Ministry's implementation of these tests is discussed in **Section 4.2**.

4.1.2 Premature Cracks Significantly Increased Ministry's Highway-Repair Costs

The Ministry annually allocates funds for minor repair work including repairing cracked pavements. Since 2007, this budget has almost tripled, increasing from $45 million to $125 million per year. (This amount is included in the 10-year, $14-billion capital budget discussed in **Section 2.1.1**.) Minor cracks that penetrate only the topmost layer of pavement can be sealed with a crack sealant, at a cost of about $7,500 per kilometre of cracks. However, when cracks are severe, a highway needs to be resurfaced; this costs about $180,000 for each kilometre of a highway lane. Thus, for example, on a four-lane highway, it would cost $720,000 to resurface all four lanes for one kilometre. Further, sealing and repairing cracks is a short-term solution; if a highway is poorly paved or the asphalt used is of poor quality resulting in constant cracking, it could need to be resurfaced as often as two times during the 15-year expected life of the highway—costing about $1.4 million in unexpected costs for one kilometre of a four-lane highway.

During our audit, we identified that highways across all regions of the province had pavement issues where cracks had to be fixed much earlier than the expected life of 15 years. Unfortunately, the Ministry did not maintain sufficient documentation for us to be able to calculate the full extent of the pavement problem province-wide and the total cost for repairing premature cracking. Nevertheless, as shown in **Figure 6**, we did identify five major highway jobs where the Ministry had documentation that enabled us to calculate the total cost of repairing premature cracking. In one of these cases, pavement needed to be repaired due to cracking within only one year of having been laid.

We noted that the Ministry paid a total of about $143 million when it originally paved these five highways. Test results at the time showed that the pavement quality was good, so four of the five contractors received bonuses. The average of the bonuses they received was $687,000. However, within one to three years, the Ministry had to repair

Figure 6: Increased Costs Resulting From Having to Repair Premature Cracks

Source of data: Ministry of Transportation

Highway	Cost of Originally Paving the Highway ($) A	Cost of Having to Repair Premature Cracks ($) B	Subsequent Repair Costs as a % of Original Paving Costs (%) B/A
Section of Highway 400*	6,913,000	3,372,000	49
Section of Highway 403*	23,226,000	12,280,000	53
Section of Highway 7*	89,246,000	700,000	1
Section of Highway 10*	11,239,000	5,500,000	49
Section of Highway 23	11,885,000	1,210,000	10
Total	**142,509,000**	**23,062,000**	**16**

* The contractor on this contract also received a bonus. The average of all bonuses received on the four contracts in this figure was $687,000.

pavement on all five jobs at an additional cost of $23 million. These costs could have been avoided if the asphalt cement had not been of poor quality. Ministry staff told us that, in some cases, even this rehabilitated pavement was of such poor quality that it would likely need to be repaired again or even replaced.

One of the highway jobs we reviewed clearly illustrated the extent of the poor quality of the asphalt that was being laid. For example, a 10-km stretch of Highway 403 was paved in late 2006 for about $23 million. Test results indicated that the pavement was of excellent quality and thus should have lasted until 2021. The contractor received $686,000 in bonuses because test results indicated that the asphalt met all of the Ministry's requirements. However, between 2008 and 2011, that section of highway was rehabilitated twice at an additional cost of $12.3 million:

- The first rehabilitation, in 2008, cost the Ministry $489,000 to seal 100,000 metres of cracks.
- Because the condition of the road continued to deteriorate after 2008, during 2010 and 2011, sections of highway were re-paved, costing the Ministry $11.6 million plus an additional $218,000 in bonuses paid to the contractor because test results indicated it had used high-quality asphalt.

However, the Ministry predicts that some of this repaved highway will need to be rehabilitated for a third time within the 15 years it was expected to have lasted with little to no cracks.

4.1.3 Ministry Paid Bonuses to Contractors for Asphalt Quality Even Though the Asphalt Cracked Prematurely

As discussed in **Section 4.1.1**, the Ministry has known since 2000 that asphalt throughout the province was beginning to crack prematurely. We also found that the Ministry did not implement tests to determine whether the asphalt laid would crack prematurely, however, it still continued to award asphalt bonuses (the tests they did perform are not the tests needed to detect the premature cracking—we discuss the shortfalls in testing in more detail in **Section 4.2.1**). **Figure 7** shows in detail how these bonuses are calculated.

In addition, one would expect contractors to pave asphalt as specified in their contracts without being awarded an extra bonus payment for doing so. However, the Ministry pays contractors bonuses when the asphalt they use on highways meets the Ministry's requirements—something contractors are always expected to do. (Penalties can also be applied in some cases if the asphalt is of poor quality.)

Figure 7: How Bonuses to Contractors for Asphalt Quality Are Calculated

Source of data: Ministry of Transportation

Asphalt Quality Test	Contractor Receives Bonus If...	Bonus Paid as % of Total Value of the Asphalt Used
Compaction test: to ensure that pavement has been densely compacted	At least 96% of all samples meet the specified density rating.	Up to 3%
Air voids test:* to ensure that there are not too many air voids in the pavement	Air void content in at least 98% of all samples does not exceed the maximums allowed.	Up to 2%
Asphalt test: to ensure that a sufficient quantity of asphalt cement has been used and that the right proportion of various aggregates, or rocks, are used	At least 96% of all samples have enough asphalt cement, and have used the right proportion of the various aggregates.	Up to 2%

* Air voids are small pockets of air that occur between the aggregate particles in the final compacted asphalt mix or what we know as pavement. A certain percentage of air voids is necessary to allow for some additional pavement compaction under traffic and to provide spaces into which small amounts of asphalt can flow during this subsequent compaction.

In 2012, the Ministry paid contractors about $8.8 million in these bonuses. It has stopped tracking the amounts paid since 2012 because of increased workload and lack of time. But since bonuses are calculated on the price of asphalt, which has increased by about 8% since 2012, it is reasonable to estimate that yearly bonus payments have continued to total at least $8.8 million.

We further noted that the Ministry's four largest contractors are also asphalt cement suppliers, so their asphalt bonuses were in addition to the revenue they made by supplying the asphalt cement as well. (As discussed earlier in **Section 4.1.1**, asphalt cement containing excessive amounts of recycled engine oil had resulted in premature cracks in pavements).

RECOMMENDATION 1

To ensure that cracks on highways are minimized and that highways can remain problem-free for the duration of their expected life cycle, the Ministry of Transportation should:

- review the practice of paying bonuses to contractors for providing asphalt that meet contract specifications; and
- assess whether contract amounts should be withheld when all contract specifications are not met.

MINISTRY RESPONSE

The Ministry appreciates the recommendations made by the Auditor General regarding how we pay contractors for asphalt placed on provincial highways. We agree that payment for asphalt should be linked to the quality of the asphalt and its expected durability. As part of our Action Plan, the Ministry will review our current practice of paying bonuses or deducting financial consequences for asphalt quality. The Ministry is committed to continuing our efforts to enhance our specifications and payment procedures related to asphalt and, more specifically, improving the quality of the asphalt cement used to produce the asphalt used on our highways.

4.2 Ministry Agreed to the Asphalt Industry's Requests to Delay Implementing Tests That Would Identify Asphalt Likely to Crack Prematurely

It is a reasonable and accepted practice for government ministries to work collaboratively with suppliers of products and services they rely on, and it is legal for registered lobbyists representing such suppliers to meet with and provide advice to government staff and officials. In the case of highways

Figure 8: Chronology of Key Events Relating to Issue of Asphalt Cracking Prematurely

Source of data: Ministry of Transportation

Year	Event
2000	Ministry of Transportation (Ministry) becomes aware of the premature cracking of pavement and issues related to the quality of asphalt.
2003–2007	Ministry conducts various trials and reaches the conclusion that poor-quality asphalt cement used in the asphalt is linked to poorly performing (prematurely cracking) pavements. Ministry, in partnership with Queen's University, also works on developing tests (Enhanced Tension and Extended Aging) that will better predict the likelihood of pavement cracking prematurely. They conduct validation tests that demonstrate the effectiveness of the developed tests.
2007	The Ministry completes the development of both the Enhanced Tension and Extended Aging tests and recommends implementation of these tests as acceptance criteria for asphalt cement on Ministry contracts. Ontario Hot Mix Producers Association (OHMPA) objects to the implementation of these tests, and begins lobbying efforts against incorporating them in contracts.
2008	A joint Ministry-OHMPA asphalt committee is formed to address the industry's concerns with the new proposed tests, and to determine when to implement them.
2012	An independent engineer verifies that Extended Aging test developed by the Ministry (in partnership with Queen's University) was best able to predict the premature cracking of pavement.
2012	The joint asphalt committee agrees to implement only the Enhanced Tension test as acceptance criteria on all Ministry contracts.
2014	The Ministry tries to implement Extended Aging test as acceptance criteria on all Ministry contracts. OHMPA objects to the Extended Aging test and requests the Ministry not to implement the test.
2015	OHMPA requests the Ministry to defer implementation of Extended Aging test on all Ministry contracts, citing cost and supply chain issues as a concern. The Ministry agreed to defer full implementation and instead, implementation of the Extended Aging is phased in and used only on 10 contracts in 2015.
2016	The Ministry continues not to implement Extended Aging test on all Ministry contracts but includes the test in only 30 contracts.

and bridges, the asphalt-production industry and the highway-construction industry have expert technical knowledge and experience for which it is prudent for the Ministry of Transportation to avail itself. That said, it is important for decision makers in any ministry to remain vigilant that suppliers' best interests not outweigh the best interest of taxpayers.

We found instances where decisions made by the Ministry were not in the Ministry's—and hence, Ontarians'—best interests, but were instead responses to pressure from the Ontario Hot Mix Producers' Association (OHMPA) and the Ontario Road Builders' Association (ORBA). Ministry staff that work with industry representatives told us that they believed the Ministry's prevalent "collaborative culture" of working with the industry had gone too far, resulting in OHMPA and ORBA being able to influence actions that favoured the industry over the Ministry. In **Section 4.2.1**, we discuss how, under pressure from OHMPA, the Ministry delayed for years instituting quality tests that would have addressed the serious problem of prematurely cracking pavement. See **Figure 8** for a chronology of key events relating to the issue of asphalt cracking prematurely.

4.2.1 Ministry Delayed Implementing Tests That Would Identify Asphalt Likely to Crack Prematurely

From 2000 to 2007, Ministry experts studied the problem of premature cracking of pavement. In 2007, after spending four years working with an expert at Queen's University to develop and prove the validity of tests, Ministry engineers developed

two new tests that, in combination, could better predict whether asphalt would crack. Yet it still has not fully implemented them both; the **Enhanced Tension test** was implemented in 2012—five years after it was developed and the **Extended Aging test** was only recently introduced in some contracts in 2015. The tests are described below.

- The **Enhanced Tension test** gauges whether pavement is flexible enough. Pavement that has more flexibility can withhold more stress throughout its life span. This test is particularly important for heavily travelled roads.
- The **Extended Aging test** predicts how well pavement will hold up in cold temperatures. In this test, asphalt cement is put under heavy pressure for 20 hours. After the 20 hours of "aging", the sample is chilled for 72 hours (this is done to replicate winter conditions in Ontario); within these 72 hours, a standard engineering test is performed whereby a weighted load is applied on the sample (at three different intervals) to assess how it reacts. In comparison, the chilling process in the previous aging tests was only one hour and the weighted load was applied only once. The Ministry and Queen's University experts found that the 72 hour process was a much better predictor of how the asphalt cement would perform and whether the pavement would crack.

Although the asphalt cement suppliers agreed that overly modifying cement with the inclusion of recycled engine oil is detrimental to pavement performance, it aggressively opposed implementing these two new tests that could detect the poorly performing asphalt and premature cracking.

One might reasonably expect that when the Ministry recognizes that something can be done to improve the poor quality of highways being provided by its contractors, it would insist that the contractors—and, if necessary, their suppliers—quickly take action to improve the quality of their work. After all, the Ministry is the client paying the contractors many millions a year. But this is not what occurred. Ministry staff explained to us that instead of a traditional client/supplier relationship between the Ministry and contractors, the Ministry's approach is to work "collaboratively" with the industry.

Therefore, the Ministry did not change the specifications for the asphalt it is paying for nor implement the tests to determine whether asphalt would crack prematurely. Instead, it has agreed that decisions such as these be discussed with OHMPA in a joint pavement committee (made up of OHMPA and Ministry representatives), and that any changes be agreed to and approved by that group. We also noted that when OHMPA was not satisfied with discussions at the joint pavement committee, it progressively approached senior Ministry officials on several occasions to not have the tests implemented.

Enhanced Tension Test Implemented Five Years Late

The Enhanced Tension test was implemented in 2012—five years after it was developed and validated.

When the test was first brought forward by the Ministry, OHMPA representatives questioned the validity of the test. They disputed testing methodologies with technical staff, and reached out to the Ministry, requesting that the test not be implemented.

They also proposed two alternative tests, which the Ministry agreed to adopt, however neither test actually addressed the issue of premature cracking. One test intended to predict whether pavement would rut—but rutting had already been eliminated in 1996 with the introduction of SuperPave. The other test was intended to limit the amount of recycled engine oil that could be in asphalt cement—but the limit was proposed by the industry and thus may not have been adequate, and as a result the test did not solve the Ministry's cracking issues. (In addition, as discussed in **Section 4.1.1**, the Ministry did not want to prescribe limits on the amount of recycled engine oil that could be used

in asphalt cement, instead it wanted to implement better tests that could predict whether asphalt laid would crack prematurely).

After five years, OHMPA representatives on the joint pavement committee agreed with Ministry representatives to implement the Enhanced Tension test in 2012.

Extended Aging Test Still Not Implemented Across All Contracts

Although the Extended Aging test was recommended for implementation in 2007, it has only been implemented for use on some of the Ministry's contracts. As a result of OHMPA and the asphalt industry's requests, the Ministry chose to phase in the implementation of the test instead of implementing it across all contracts.

The industry's position was that the Extended Aging test's 72-hour test process was not an accurate predictor of the likelihood of pavement cracking, even though Ministry and Queen's University experts had concluded it was.

As a result, the Ministry agreed to have an independent engineer review the already-verified testing methodology. This engineer had 30 years of experience in this field and was considered an expert in asphalt and SuperPave. In 2012, the independent engineer confirmed the Ministry's original findings and concluded that the test was able to predict the future performance of pavement with a good degree of certainty. In scientific terms, this meant that the test was accurate in predicting whether pavements would crack early. However, the industry objected to the engineer's results.

Rather than acting upon the independent engineer's findings, the Ministry again accommodated OHMPA's request and agreed to wait for results of more field trials on highway construction jobs before implementing the test. In late 2014, results showed that two sections of pavement on Highway 403 performed significantly differently. For one section, the contractor was not required to perform the Extended Aging Test before laying the asphalt; that pavement cracked within three years. In the second section, the contractor was required to meet the requirements of the Extended Aging Test on its asphalt before laying it—that section of highway was still crack-free three years later.

With results now confirmed and validated numerous times, the Ministry had planned to implement the test that year. OHMPA objected to its implementation, stating that it needed more time to develop a better supply chain network. Industry members escalated the matter within the Ministry. The Ministry again agreed to delay implementation until the industry's concerns were addressed. As a result, instead of implementing the test across all contracts in 2015, the Ministry chose to phase-in implementation. The Ministry informed us that this approach was chosen to allow OHMPA time to adapt to the new testing regime, even though OHMPA had been aware of this proposed change since 2007, giving it plenty of time to adapt. Moreover, as **Figure 9** shows, some municipalities (as well as the privatized Highway 407) had begun implementing the Extended Aging test across all their road construction contracts as early as 2010. OHMPA had been able to satisfy the new asphalt standards in large municipalities, so it was questionable why it was unable to do so for the Province.

Figure 9: Year in which Municipalities and Highway 407 Began Implementing the Extended Aging Test

Source of data: Municipality and Highway 407 Representatives

Municipality	Year Test Implemented
Kingston	2010
Durham Region	2014
Hamilton	2015
Peel Region	2015
Timmins	2015
407 Privatized Highway	2015
Ministry	Yet to be implemented on most construction projects*

* The Ministry began implementing this test only on some contracts in 2015. This test was implemented in 10 contracts in 2015 and 30 contracts in 2016 (the Ministry annually tenders about 250 highway construction contracts).

In June 2015, the test began to be phased into major construction work for highway jobs. However, it was included in only 10 of the 240 contracts that year, and in an additional 30 contracts tendered in 2016. (At the time of our audit, the Ministry had tendered about 110 asphalt-related contracts in 2016 but was still in the process of tendering.) The Ministry informed us that it is moving toward including the test in all contracts at some future time; however, a target date for complete implementation of the test on all contracts has not been decided.

RECOMMENDATION 2

To identify poor-quality asphalt before it is laid on highways, the Ministry of Transportation should immediately incorporate the Extended Aging test into its standard testing methodology for asphalt.

MINISTRY RESPONSE

The Ministry agrees with the Auditor General's recommendation. As one of the first road authorities to identify the issue with asphalt cracking in colder climates, the Ministry actively led research and consultation with multiple subject matter experts, including the expert referenced in the Auditor General's report, to conclusively determine the underlying cause and potential solutions. In December 2015, the Ministry implemented the Extended Aging test into its standard test methodology for all 2016 projects that required a 15-20 year pavement service life. As planned, starting in 2017, this testing will be extended to all projects that require a shorter pavement service life of 10-15 years. As part of our Action Plan, the Ministry will review and determine whether it will extend the test to all asphalt paving contracts.

4.3 Ministry's Internal Operational Policies Changed to Benefit the Ontario Road Builders' Association

ORBA's success in influencing the Ministry to change policies on late fines, highly litigious contractors and dispute resolution has weakened the tools the Ministry has to manage contractors' performance, is increasing Ministry costs, and unnecessarily adding to staff and management workloads.

Similar to the Ministry making decisions that favoured the asphalt industry's interests over those of Ontarians (as discussed in **Section 4.2**) so too has it changed its policies to accommodate requests made by the road builders. In particular, we noted three significant policy changes the Ministry made following pressure from the Ontario Road Builders' Association (ORBA) that favour contractors:

- contractors can delay paying fines for delivering late work (2011);
- highly litigious contractors can continue to bid on Ministry jobs even though they repeatedly sue the Ministry (2015); and
- contractors can take disputes to external referees rather than have them reviewed by Ministry staff (2016).

We discuss these three policy changes in detail in the following sections. But first, it is important to establish some context.

According to Ministry staff, the relationship between ORBA and the Ministry has changed considerably in the last ten years. Established over 80 years ago, ORBA has typically provided the Ministry with important input on technical issues, prices and contract management. Listening to ORBA's input has been important to the Ministry because ORBA represents a majority of the contractors that work on Ministry projects. However, ORBA has transitioned from being an advisor to playing a much more influential role in the Ministry's internal policy-making processes. ORBA has become a more persistent and effective lobbyist

on issues important to contractors, in an attempt to resolve matters in the contractors' favour, even when it is not in the best interest of taxpayers. We noted that, in recent years, ORBA has been increasingly escalating matters beyond working-level Ministry staff to senior Ministry officials. These matters relate to internal Ministry policies that if changed, would benefit ORBA members.

4.3.1 Despite Staff Advice, the Ministry Allowed ORBA to Significantly Influence Internal Ministry Policies

ORBA's increasing influence started in 2010 when a large contractor was assessed $2.1 million in late fines (also known as "liquidated damages") for not completing jobs on time. The contractor (whose employees sit on ORBA's senior management committee) was late by about five months on average. Unsuccessful in having the fines waived by Ministry staff, the contractor persuaded the Ministry to order a review of whether the Ministry's policies on late fines were fair.

The review was conducted by Internal Audit and, in addition to looking at policies around late fines; it also looked at other broader aspects of contract management. Although it is rare throughout the provincial government for internal audit reports to be shared with outside parties, the Ministry shared this one with ORBA. (The Ministry informed us that it did so because the report would have been released in any event if a request was made under the *Freedom of Information and Protection of Privacy Act*.)

ORBA requested that it be able to sit down with the Ministry to review the report. The Ministry agreed and established a joint policy committee of ORBA and Ministry representatives. Ministry staff were strongly concerned with establishing such a joint policy committee because it would allow ORBA to strongly influence how the report's recommendations should be implemented, which was an internal operational matter. Moreover, it was also decided that:

- the composition of the policy committee be six ORBA representatives (five of which are contractors, including the one that was assessed significant late fines and persuaded the Ministry to initiate the internal audit) and six government representatives (of which only three were staff members of the Ministry of Transportation; the other three consisted of one representative from Infrastructure Ontario, one from the Ministry of Infrastructure, and one from the Ministry of Finance); and
- rather than working on implementing recommendations made by Internal Audit, the joint policy committee should use the action plan and recommendations made by ORBA itself as the basis of discussion. We noted that ORBA's action plan, as expected, was in its members' best interests.

Several policy changes made by the policy committee were not in the best interests of the taxpayers. We discuss these in subsections A, B and C, which follow.

The scope of activities of the joint policy committee was not limited to the three topics discussed below; we noted that four other topics were under discussion and that policy changes stemming from these discussions are at various stages.

A. Contractors Are Now Able to Delay Paying Fines; Some Large Fines Now Uncollectible

Collecting Late Fines—Original Policy

Liquidated damages (late fines) were collected when a contractor was late in completing a job. If a contractor did not agree with the fine, it could file a dispute at the field-staff level and, if needed, escalate the matter for a regional or head office review.

ORBA's Position

In 2010, ORBA raised concerns that the Ministry collected late fines right away (known as field level collection), even if the contractor wanted to file a dispute or escalate the matter to higher levels for review.

Collecting fines right away is a common practice in other jurisdictions (Alberta, British Columbia and Quebec) as it encourages contractors to be proactive and timely so as not to be charged late fines that they would have to pay right away. We noted that ORBA's concern likely stemmed from a handful of contractors that made little effort to meet timelines, and from which the Ministry had collected large late fines.

Policy Change Allows Contractors to Escalate Claims and Delay Paying Fines; Some Fines Now Uncollectible

In 2011 (before the joint policy committee was established), the Ministry changed its policy and agreed to postpone collecting late fines if the contractor was escalating the fine for further review. Contractors were thus given an incentive to escalate claims as frequently as possible because they could postpone paying these fines. After this change in policy, there was an increase in the number of claims filed by contractors. For example, between 2012 and 2015, the number of claims filed for head-office review increased from eight to 16. We also noted that, in the same time period, there was no increase in the percentage of claims eventually settled in the contractors' favour, so it is likely that some contractors may have increasingly escalated claims not because they expected to win, but because they wanted to delay paying. (In addition, there are five regional offices and numerous field-level staff that also receive hundreds of claims—and only a fraction of their claims get escalated to head-office for review. However, the Ministry does not track the total number of their claims).

By escalating these claims, contractors have been able to postpone paying a total of about $6 million in fines for up to four years. Although escalated claims generally take up to one year to review, we noted some took up to four years to review. Ministry staff told us the delays were due to the increased volume of claims to be reviewed and also because, for a period, fine collection was put on hold until the joint policy committee finished its work on implementing ORBA's action plan.

During these four years, two contractors went bankrupt; their fines, worth $660,000, will never be collectible by the Ministry. Two other smaller contractors have six large fines assessed against them totalling $1.4 million. Ministry staff informed us that they will need to negotiate payment plans with these contractors because of the contractors' cash flow limitations. There is some risk that the fines might not be paid in full.

We asked the Ministry if, before changing its policy on paying late fines, it had conducted any analysis of whether contractors were experiencing an increased need to escalate claims or if there was some other need for changing the existing policy. The Ministry informed us that it had conducted no such analysis.

In comparison, we noted that Alberta, British Columbia and Quebec all collect late fines immediately, then issue refunds to contractors later if the escalated dispute is resolved in the contractors' favour.

B. Litigious Contractors Can Repeatedly File Lawsuits against the Ministry and Continue to Take on Ministry Projects

Excluding Litigious Contractors from Bidding—Original Policy

The Ministry had the ability to exclude highly litigious contractors from bidding on future work. This "exclusion clause" was created in 2005 in response to the behaviour of some contractors. Its purpose was to prevent contractors from filing frivolous suits, and to stop extremely litigious contractors from winning more contracts where they can again sue the Ministry.

ORBA's Position

ORBA opposed this clause from the beginning because it felt the clause unfairly discriminated against contractors simply because they had sued the Ministry.

However, we noted that the Ministry had never actually used the clause to exclude a contractor.

We also noted that the process was much fairer to contractors than similar processes in other jurisdictions. In Ontario, if the Ministry was considering excluding a contractor, the contractor could present its case prior to a decision being made. If the contractor was unhappy with the decision, it could then appeal to a committee made up of Assistant Deputy Ministers (from the Ministry of Transportation and other Ministries) to review the decision. In other jurisdictions, contractors are not given the opportunity to present their case nor to appeal the decision.

Ministry Removed Exclusion Clause even though Some Contractors Were Becoming More Litigious

After several rounds of discussions at the joint policy committee, ORBA's stance on this clause remained unchanged. Although the Ministry has never exercised this clause, the Ministry removed it from all contracts in 2015 after two years of deliberation with ORBA. The Ministry informed us that it made this decision because, given it had never excluded a contractor in the past for being too litigious, if it began exercising the clause, there was a risk it could be challenged in court.

However, there were business reasons for having the exclusion clause—since most contractors that work for the Ministry obtain most of their revenue from the Ministry, they were wary of getting excluded. So the exclusion clause helped ensure that they only sued when they felt the Ministry's dispute decision was clearly unfair.

In addition, about 95% of disputes never made it to mediation or litigation, and were successfully resolved through the dispute-resolution process; the clause was intended for the contractors that were involved in some of the remaining 5% of cases. Ministry records show that between 2007 and 2015, contractors filed 12 lawsuits against the Ministry. Prior to 2007, lawsuits had been virtually non-existent. In 2015, instead of addressing the problem caused by litigious contractors, the Ministry decided to remove the clause.

At the time of our audit, there were four outstanding lawsuits against the Ministry for $27 million in total. There were also 26 disputes at the mediation stage; some of these could end up in court as lawsuits. Lawsuits considerably add to the workload of Ministry staff and to legal costs.

Litigious Contractor Avoided Exclusion and Continues to File Lawsuits Against the Ministry

One contractor had disputes with the Ministry in 14 of its 19 contracts between 2004 and 2014. The contractor escalated six disputes to the mediation stage, of which three were taken to court. In 2010, the Ministry could have exercised its right to exclude this litigious contractor from bidding on future contracts. This would have been the first time that it did so. However, before the Ministry could decide on whether to exclude the contractor, the contractor asked the Ministry to conduct the review discussed at the beginning of this section. Thus the decision to exclude this contractor from bidding on future projects was put on hold until the joint policy committee implemented recommendations from ORBA's action plan. This specific contractor was one of the members that represented ORBA on the joint policy committee and participated in discussions around the removal of this clause.

After discussions with the joint policy committee, the Ministry removed the clause. This contractor did not get excluded from bidding on other contracts and has recently filed a $22 million lawsuit against the Ministry, which is for about 40% of the value of the contract. The Ministry had previously reviewed the contractor's claim through its dispute-resolution process and found it to be unfounded.

C. Change in Ministry Policy May Provide Incentive for Contractors to File Claims More Often

Dispute-Resolution Process—Original Policy

In the original dispute-resolution process, a contractor had to escalate its claim through three levels within the Ministry before launching legal action. The intention was to minimize litigation

by first providing three different opportunities for assessment.

ORBA's Position

ORBA's concern was that the process lacked sufficient independence because disputes were reviewed only by Ministry staff at all three levels of escalation. However, we noted that about 95% of disputes had been successfully resolved through the existing process and that, based on the sample of dispute files we reviewed, the Ministry's decisions were in accordance with contract terms. Nevertheless, ORBA proposed that the Ministry allow contractors to escalate claims to an independent referee at an early point during the dispute. Contractors would benefit from this change as referees tend to settle on middle ground decisions.

Under the new dispute-resolution process that the joint policy committee and Ministry agreed to implement in 2016, contractors can now ask for a referee to be involved at any level of the dispute process. Since the referee system is still being developed, there has not been a refereed decision yet. However, Ministry staff have identified several risks, including:

- Referees are independent third-party professionals (typically practising or retired engineers, claim consultants or construction lawyers) who may come to a decision that is in the "middle ground" between the parties involved instead of strictly applying the terms of the contract. This might not be in the best interests of the Ministry, especially in cases where the Ministry feels it is in the right contractually. In addition, the Ministry informed us that there is a risk of contractors inflating their claims in order for the "middle-ground" ruling (i.e., the settlement amount) to be higher.
- Decisions made by the referee are final and can only be challenged either through arbitration or in court. Historically, the Ministry has not taken contractors to arbitration or court unless the situation is extreme. Ministry staff informed us that it is highly unlikely that the Ministry would challenge these middle-ground decisions in court.

For these reasons, the contractor may have an incentive to pursue the referee route. Even if the contractor incurs additional referee costs, any resulting payout from the Ministry would generally offset the costs. For the Ministry, referees are costly because, rather than having Ministry staff decide on escalated claims, the Ministry must pay 50% of all referee costs when a contractor chooses to escalate a claim.

RECOMMENDATION 3

In developing internal policy, the Ministry of Transportation should ensure that decisions made are in the best interest of all Ontarians. In this regard, the Ministry should:

- evaluate industry best practices on the collection of liquidated damages and determine whether to re-implement its original policy of collecting liquidated damages at the field level to be in line with industry best practices;
- re-incorporate the provision for excluding highly litigious contractors from bidding on further contracts, and appropriately exercise it when needed;
- pilot and fully assess the use of reviews of referee decisions as an alternative to escalating to litigation before this process is included into policy and procedures;
- re-implement its original dispute-resolution process if it determines that the use of referees will not be incorporated into its policies and procedures; and
- ensure that whenever committees are established to review and make policy implementation decisions, that the committee members are not in a conflict of interest.

MINISTRY RESPONSE

The Ministry agrees with the Auditor General that its policies need to continue to be developed and made in the best interest of all Ontarians, and free of any conflict of interest. The Ministry is committed to the timely completion of its contracts and fair compensation for all of its contractors, consultants, and suppliers. The Ministry will engage a third-party expert to undertake a review of its key contract provisions including those identified in the Auditor General's recommendation. This review will be completed by 2017.

4.4 Increased Outsourcing Has Led to Less Oversight On Construction Projects

Over the last two decades, the Ministry has steadily contracted out more and more of the work on construction jobs: not only the design of projects, but also the oversight on its construction. The Ministry generally outsources the contract administrator role and has the contractors hire their own Quality Verification Engineers to certify that key construction activities are performed to appropriate standards. Since 1996, contractors have also been responsible for collecting and submitting asphalt samples for quality testing. The Ministry's Quality Assurance staff visit construction sites periodically to assess whether the contractor and the contract administrator are performing their work as required.

Such an approach has certain benefits, particularly in an environment where the government is attempting to minimize the number of staff it keeps on its payroll. However, this approach also comes with risks: if the oversight function is not performed by Ministry staff, then whomever it is outsourced to must be reliable, professional and independent of the contractors performing the work. During our audit, we found that oversight was structured in such a way that the contractors were essentially monitoring themselves with respect to engineering (QVE) and material quality.

In **Section 4.4.1**, we discuss how the handling of asphalt test samples used to determine contractors' bonuses was lax in that contractors would be able to tamper with and substitute samples of high quality for actual asphalt samples. In **Section 4.4.2**, we discuss how professional engineers who are responsible for certifying that infrastructure is built to the quality standards it was designed to achieve are engaged by the contractors, not the Ministry; some have provided conformance certificates for infrastructure that was later determined to not meet standards. In **Section 4.4.3**, we outline how on some projects started since 2008, there is no sample testing of asphalt used: contractors have to provide a warranty that the roads will hold up over a certain period of time. However, when the roads fail to function as required, the Ministry has had difficulties having contractors honour their warranties.

4.4.1 Contractors Have the Opportunity to Tamper with Samples to Obtain Bonuses

As discussed in **Section 4.1.3**, contractors receive bonus payments if their asphalt samples pass tests with certain results. During our audit, we found that contractors have the ability to tamper with samples. This is because they have full custody of the sample after it is taken from the road and before it is sent to the testing lab.

In 2012, these bonuses totalled about $8.8 million. Since 2013, the Ministry stopped collecting information about bonuses, citing decreasing staffing levels and increasing staff workloads as reasons for why it stopped.

In 2011, Ministry engineers suspected something irregular had taken place when they reviewed test results on one job and found that all 100 samples passed tests with "great results." When Ministry engineers visited the job site, they were surprised to find that they could only locate three areas from which samples had been extracted from the highway. The Ministry was not able to determine exactly what took place and retracted the bonus it had paid the contractor for this job.

A similar instance occurred in 2012 in a different region with a different contractor.

In 2014, a whistleblower approached the Ministry with detailed information on how one contractor was switching samples in order to obtain bonuses. The whistleblower explained that the contractor would submit good samples for testing purposes but lay poor-quality asphalt on highways. The whistleblower, who had been working in the asphalt industry for a long time, explained that sample switching has been happening as far back as the early 2000s and stated that this is a systemic issue throughout the industry. The whistleblower explained in detail how contractors could circumvent the controls the Ministry had put in place on the collection and submission of samples.

The Ministry provided details shared by the whistleblower to its Forensic Investigation Team, which concluded that "there is not enough evidence to justify an investigation at this time." When we met with the OPP, they told us that they thought the information provided by the whistleblower was credible, but they did not conduct an investigation as they were waiting for the Ministry to provide additional information if it wanted to start an investigation, which it did not.

We also noted that in October 2015, Internal Audit had a similar concern it had reported in its audit report. It noted that contractors had the opportunity to tamper with samples as they were in full custody of the sample after it was taken from the road and before it was sent to the testing lab.

We found that the Ministry has not taken any action to investigate which contractors could have switched samples and impose fines on them. Even if the Ministry's belief is accurate that there is insufficient evidence to investigate the incident brought forward by the whistleblower, there are still no controls to prevent contractors from tampering with samples as the whistleblower claimed.

We also noted that the Ministry has not taken timely action to put in place processes to ensure that sample switching cannot occur. Although the issue with tampered samples was first documented in 2011, it was not until July 2016 that the Ministry conducted a pilot to assess the feasibility of having an independent party, instead of the contractor, collect and ship samples to labs for testing.

RECOMMENDATION 4

To ensure that testing of asphalt quality is a constructive process and that information from whistleblowers is adequately investigated, the Ministry of Transportation should ensure that controls and appropriate processes over asphalt samples are in place to prevent the risk of sample switching.

MINISTRY RESPONSE

The Ministry agrees with the Auditor General with regard to the custody of asphalt samples and had already implemented a province-wide trial in May 2016 where the care and control of samples was undertaken by the Ministry or its agents. As planned, starting in 2017, for all new contracts, the care, control and oversight of samples used for verification purposes will be the responsibility of the Ministry.

4.4.2 Engineers Who Certify Structures Are Built Correctly Are Not Independent from Contractors, and a Few Have Provided Certifications For Structures Later Found To Have Problems

One of the most important quality-control measures in building public infrastructure is to have sufficient oversight by a professional engineer independent from the contractors to verify and provide certification that key construction activities are performed to the appropriate standards. For the Ministry, this role is fulfilled by Quality Verification Engineers (QVEs)—hired by the contractors—who are responsible for signing off on 41 different standards that relate to structural, foundational and electrical specifications. The Ministry also relies on its contract administrators and quality assurance

staff to provide oversight, but a sign-off by the QVE is intended to provide assurance to the Ministry that a structure will be safe for public use and that specifications have been met.

Given the nature and importance of their work, QVEs should be independent from the construction contractors whose work they are reviewing. Yet we noted that they are actually hired by, work for and report directly to the contractors. Although QVEs are professional engineers and must adhere to the ethical guidelines of Professional Engineers Ontario (the engineering regulatory body) or risk losing their license, during our audit, we noted that Ministry regional staff had identified instances across the province where QVEs provided erroneous or misleading conformance reports to the Ministry. The consensus of almost all Ministry regional offices was that they had concerns with the lack of independence of QVEs and certification work the QVEs performed.

Contractor's Engineer Certified that Nipigon River Bridge Was Properly Constructed; Bridge Malfunctioned Shortly after It Was Opened to Public

In January 2016, just six weeks after it was opened to the public, the Nipigon River Bridge failed and had to be closed to traffic. One end of the bridge was lifted about 60 cm higher than the other when motorists were driving on it (see **Figure 10**).

Figure 10: Nipigon River Bridge After It Malfunctioned
Source of data: Ministry of Transportation

The Nipigon River Bridge failed after one end rose by 60 cm.

The Ministry conducted four separate investigations. The investigations found that one of the concerns was that the bridge had not been built—and specifically the bridge bearings—according to specifications. A bridge bearing is a component of a bridge that typically provides a resting surface between bridge piers and the bridge deck to reduce stress and allow some controlled movement of the bridge. The investigation also found that the QVE, however, had signed off stating that the bearings used on the bridge were in accordance with required specifications. According to a publication by the Professional Engineers Ontario, sign-offs such as this one are held in high regard because the responsible engineer is assuring others that the information can be depended upon with a high degree of confidence. The investigations, however, showed that the QVE provided an inaccurate sign-off. Specifically:

- One component of the bearings was not made from the right grade of steel. The steel used was about 30% weaker than required.
- The bearings were required to be rotatable, but in fact could not rotate at all.
- One of two bearings was not properly equipped to sustain the upward pull of the bridge's cables.

As a result, some of the bridge bearing components did not meet the Canadian Highway Bridge Design Code on multiple counts. (The Ministry informed us that it, and the Professional Engineers of Ontario, are both still in the process of conducting additional investigations into this incident to determine all other causes that could have also led to the malfunction of the bridge.)

Other Examples of Engineers Providing Inaccurate Conformance Reports

We noted that in several other cases between 2011 and 2016, the Ministry identified that QVEs provided inaccurate conformance reports (the Ministry informed us that it had filed a few complaints with

the Professional Engineers of Ontario regarding this). For example:

- In one case, a QVE certified that a bridge was built correctly with appropriate metal components. However, the bridge partially collapsed during construction. It was later determined that the metal components could only hold about 90% of the required load.
- In another case, a QVE conformance certificate was issued even though the contractor failed to place reinforcement steel bars inside a highway barrier wall, as required.
- The QVE is required to witness when concrete is being poured into a steel cage in the construction of a footing that holds up highway signs (footings provide foundational stability to overhead highway information signs and can run about 10 metres deep into the ground). However, in one instance, the QVE was evidently not on site to witness this as the contractor actually installed the steel cage upside down (which, if left unfixed, would have caused the highway information sign to collapse onto car traffic below). The QVE signed off affirming that the bridge and steel cage were built to specifications.

In these noted instances, the construction mistakes were fixed by the contractor at the contractor's expense.

We also noted that Ministry staff found that one QVE had photocopied and pre-signed blank conformance certificates, and had used the same certificate on five different Ministry projects.

RECOMMENDATION 5

To ensure it obtains a high level of assurance that infrastructure is safely built according to specifications, the Ministry of Transportation should hire or contract its own engineers who are independent from the contractors to perform verification activities.

MINISTRY RESPONSE

The Ministry appreciates the Auditor General's recommendation and is committed to constructing infrastructure that meets its specifications, codes, and standards. The Ministry's current practice is to use consulting engineering firms or in-house staff to provide the primary level of oversight, supplemented with Quality Verification Engineers for specific critical elements. As part of our Action Plan, the Ministry will review its contract administration process as it relates to Quality Verification Engineers, including how they can perform their duties independently from the contractors.

4.4.3 Ministry Has Had Difficulties Enforcing Contractors' Warranties

In 2008, the Ministry began introducing performance-based specifications on some contracts. Performance specifications focus on the expected outcome of the work rather than on how that outcome is supposed to be achieved. For example, performance specifications might dictate that seven years after a highway construction job is completed, there should be little to no long cracks running deeply in the asphalt. The steps and construction actions required to achieve this—which would be prescribed in traditional contracts—are generally left up to the contractor to decide. Thus, in projects with performance specifications, the Ministry allows the contractor to make more decisions on its own, there is less oversight of the contractor, and the Ministry does not test nor receive the result on the pavement quality under these contracts.

The Ministry required contractors to provide extended warranties so it would be protected in the longer term from deficient work. Previously, construction projects usually came with one-year warranties; with performance specifications, the Ministry has generally required warranties of three to seven years in length. As of the time of our audit, there had been about 100 three-year-warranty

projects, six five-year-warranty projects and 14 seven-year-warranty projects.

We reviewed almost all seven-year-warranty contracts as seven years is long enough for pavement defects requiring remedial work to show up. In about half of them, we found that contractors have repeatedly tried to absolve itself from its responsibilities under warranty (in the other half of the contracts, either there were no pavement defects or the contractor fixed the pavement defects under warranty).

For example, on a job where one kilometre of highway was originally paved in 2010, there were 1.5 kms of cracks by 2012 and, at the time of our audit, the contractor had not agreed to fix these cracks.

We found that to have contractors fix pavement defects under warranty, the burden of proof is on the Ministry to show that no other factors could have caused pavement defects other than the contractor's poor materials and workmanship. Ministry staff has had to dedicate considerable resources in disputing contractors' claims that other factors caused the pavement defects. For example:

- in one instance, the Ministry had to disprove the contractor's assertion that the motion and weak roadbed because of an adjacent lake will not cause pavement defects; and
- in another instance, the Ministry had to counter the contractor's claim that an accident on another highway nearby had contributed to increased car traffic on the highway that, according to the contractor, caused pavement defects such as cracks.

Ministry Paid Contractor for Fixing Defects that Were Covered under Warranty

In one instance, a contractor followed the Ministry's instructions to fix a road that was under warranty, but then submitted a claim and was reimbursed about $1 million. The contractor claimed there were several reasons why it was not responsible for the repair costs. These included a claim that the contractually agreed-upon methodology for determining the pavement defects was flawed, and that the Ministry was not using the right machine to determine pavement defects. The contractor presented the Ministry with its own analysis, claiming that about two-thirds of the repairs were not its fault.

The Ministry informed us that all of the contractor's claims were unfounded. Although the Ministry disagreed with the claim, it was compelled to pay the contractor about $1 million for repairing defects that it believed the contractor was actually liable to repair. The Ministry decided to do this because of the high burden of proof it faced in having to prove to the contractor that the pavement defects were a direct result of the quality of the material and poor workmanship.

RECOMMENDATION 6

To ensure that contractors perform warranty work they are responsible for, the Ministry of Transportation should:

- change its warranty provisions so that the burden of proof is not on the Ministry to show that no other factors could have caused cracks for poorly performing pavement and that the warranty is based on items that should have been foreseen; and
- enforce its warranty provisions for costs to be borne by the contractor for all contracts with warranties.

MINISTRY RESPONSE

The Ministry appreciates the concerns raised by the Auditor General concerning warranties. In recent years, the Ministry made some initial improvements to its warranties, warranty provisions, administrative guidelines and oversight regime as a result of lessons learned from its earlier contracts. As part of its Action Plan, the Ministry will conduct a further review to see what additional improvements could be made including the recommendations of the Auditor General.

4.5 Ministry Selection Process Is Fair and Transparent, but Ministry Is Lenient in Managing Poor-Performing Contractors

We did not identify any concerns about the fairness and transparency in the process the Ministry uses to select contractors (as detailed in **Section 2.4**). However, we did note some concerns about the Ministry not adequately managing contractors' performance and not taking into account previous work performance in the determination of eligible contractors that can bid on future projects. These are detailed in the following section of the report.

4.5.1 Many Poor-Performing Contractors Have No Incentive to Improve

One of the ways the Ministry manages the performance of contractors is through its Contractor Rating System, which is used in selecting contractors for future projects. We noted that the Ministry's approach to addressing poor-performing contractors is lenient. For instance, contractors that receive a rating between 55 and 70 points (out of 100) are considered to have serious performance issues, but we noted they are not treated any differently for their poor performance and can continue to bid on Ministry projects. They simply receive warning letters. Contractors rated less than 55, of which there were only five over the last five years, were impacted through reductions in the total cost of projects they could bid on, which effectively prevented them from bidding on future work.

Although there is not a significant number of contractors that perform poorly, on average, at least four contractors are rated between 55 and 70 points each year. We noted that over that last five years, some of these contractors received unsatisfactory rankings for two or three years in a row. Each year, the contractor simply received a warning letter. As such, contractors with ratings between 55 and 70 have no incentive to improve their performance.

For example:

- One contractor received a poor rating of 66% because it refused to give the Ministry's Quality Assurance staff access to concrete test records. Withholding test results was in direct violation of its contract with the Ministry. In addition, a Ministry engineer had asked to review test results because he noted on two different occasions that the contractor was improperly ventilating or drying concrete slabs. This improper technique reduces the strength of the concrete and makes it susceptible to more cracks in the future. The contractor only received a warning letter and was not excluded from future contracts.
- Another contractor ranked low (63%) on the rating scale because it provided poor-quality asphalt and concrete. The contractor was also late in meeting interim deadlines several times and was rated 55% on timeliness. The contractor only received a warning letter and was not excluded from future contracts.

Contractors that have received unsatisfactory ratings continue to perform significant amounts of work for the Ministry. For instance, three contractors that have consistently received an unsatisfactory rating for several years because of their poor performance have been awarded construction contracts worth about $45 million each over the last five years.

4.5.2 Ministry Continues to Award Projects to Contractors That Breach Safety Regulations

The Ministry penalizes contractors if they breach safety regulations during construction. For first-time offenders, the Ministry works with contractors to change their behaviour through discussions and improvement plans. For repeat offenders, the more serious the breach, the greater the penalty. The penalties are not monetary fines; instead, the penalties limit the amount of future work a contractor can bid on. For example, if a contractor is allowed

to bid on up to $5 million worth of construction projects, a 40% penalty would put the contractor's new ceiling at $3 million.

We reviewed seven such infractions in total and noted that none of the penalties were large enough to prevent contractors from bidding on Ministry projects. This is because a contractor's bidding ceiling can be high enough that, even despite a penalty, the contractor does not reach its full ceiling amount. For example, one contractor was authorized by the Ministry to bid on about $100 million worth of projects, which was reduced to about $75 million after it was penalized. However, we noted that this contractor had never bid on more than $9 million worth of projects in the past. Without imposing penalties that actually impact contractors, there are no implications to contractors if safety regulations are not being met.

In another instance where the penalty did not impact the contractor, the contractor was removing very heavy pieces of concrete over a 400 series Highway without closing the lane directly underneath. This was a violation of safety regulations and posed a potential risk to the travelling public. Furthermore, the platform installed on the underside of the bridge was too weak to support concrete in the event that it fell from the bridge, which was also a violation of safety standards.

We noted a few other instances where the Ministry somewhat penalized contractors through a partial ban—for example a contractor with an infraction on a bridge construction project would not be allowed to bid on similar bridge construction projects. However, partial bans still allow contractors to bid on other Ministry projects, receive contracts and earn revenue from Ministry projects, thus making these types of penalties ineffective in providing sufficient incentive for contractors to improve their safety performance.

4.5.3 Contractors Misreport Financial Information to Increase How Much Work They Can Bid On

Contractors are required to self-report certain financial information that is used to determine their bidding room (the total value of contracts they can bid on). The Ministry started auditing contractors' self-reported numbers in 2014; however, it has yet to enforce action on contractors that falsely misreported financial information.

The Ministry's review found that, on average, one in every five contractors misreported their financial information. In some of these cases, the contractors misreported information to actually inflate their bidding room, effectively allowing them to bid on contracts with a higher total value than they should be allowed to. These ceilings are set by the Ministry to ensure that no contractor takes on more work than it is capable of completing; therefore, misreporting these numbers puts the Ministry at risk.

Many contractors that misreported information ended up bidding on projects that were higher than what their ceiling should have been if they had submitted accurate financial information. In one instance, a contractor won a $4 million construction contract that was in excess of its approved ceiling.

We noted that, even though the Ministry had identified instances of misreported financial information, it never brought these to the Ministry committee that reviews contractors' non-compliance. The Ministry committee reviews non-compliance to determine what penalties should be assessed against a contractor. As a result, no penalties were issued against these contractors. Without any consequences imposed, there is little incentive for contractors to accurately report information.

4.5.4 Ministry Continues to Award Contracts to Smaller Contractors with a History of Performance Issues

We found that small contractors (those that can bid on minor construction projects less than $1 million) that are banned from working with the Ministry in one region due to a history of poor performance can continue to bid on and win contracts in other regions. We noted that this is because the Ministry does not track performance of these contractors centrally as it does for larger contractors through its Contractor Rating System. Minor construction projects represent about 10% of all Ministry spending or about $116 million annually.

We noted, as an example, a small contractor was banned in the Ministry's Eastern and Central regions and continued to receive contracts in other regions. In one contract in the Eastern region, it installed 58 of 61 highway signs incorrectly. Signs were placed either too close to or too far from their designated spots. This increased the risk to drivers that they might not see exit signs in time, which posed a potential safety risk to them. This contractor also had other issues, such as using cheaper paint for signs than the contract specified and not finishing jobs on time.

Two other regions continued to award contracts to this contractor, and both regions also noted performance issues.

Across these four regions (including the Eastern and Central regions before the contractor was banned), the contractor was awarded five contracts worth a total of $2 million over a two-year period. The contractor made a serious safety breach on one of these jobs (in addition to various other performance issues). In this instance, while working on the shoulder lane of a live highway, the contractor violated safety standards by not setting proper barriers: workers and equipment encroached the live lane. Although there was no reported consequence, this jeopardized the safety of workers as well as the travelling public.

Between 2012 and 2016, this contractor received eight infraction notices where it was formally notified of its safety and performance issues. (The Ministry also continues to receive complaints from the contractor's subcontractors that they were not being paid at the time of our audit.) At the time of our audit, the contractor was still allowed to work in two of the four regions.

RECOMMENDATION 7

To ensure that poor-performing contractors and contractors that do not follow safety standards and other requirements are appropriately penalized for their performance or behaviour, the Ministry of Transportation should:

- establish appropriate penalties for contractors with unsatisfactory ratings;
- incorporate stricter rules around excluding contractors from bidding if they breach safety regulations;
- establish appropriate penalties for contractors that report inaccurate financial information to the Ministry; and
- implement policies and processes to exclude smaller contractors from bidding in all regions if performance issues are noted in one or more regions.

MINISTRY RESPONSE

Construction safety and quality are fundamental ministry priorities. As such, the Ministry agrees with the Auditor General's recommendation that contractors who do not follow safety standards and other Ministry requirements should be appropriately dealt with. The Ministry also agrees that our administrative practices must have adequate safeguards to ensure our contractors are operating safely and providing quality work, for all contracts large or small. As part of its Action Plan, the ministry will review and implement, as appropriate, additional safeguards beyond its current contract administration regime.

In June 2014, the Ministry enhanced its financial auditing and oversight of contractors. Based on the Auditor General's recommendation, the Ministry will review our financial reporting requirements and consider additional controls to hold our contractors accountable for the information they report.

Section 3.11 Physician Billing

1.0 Summary

As of March 31, 2016, Ontario had about 30,200 physicians (16,100 specialists and 14,100 family physicians) providing health services to more than 13 million residents at a cost for the year then ended of $11.59 billion. This is 20% higher than the $9.64 billion paid to physicians in 2009/10.

Physicians operate as independent service providers and are not government employees. They bill their services to the province under the Ontario Health Insurance Plan (OHIP) as established under the *Health Insurance Act*.

Under the December 2012 Ontario Medical Association Representation Rights and Joint Negotiation and Dispute Resolution Agreement (OMA Representation Rights Agreement), the Ministry of Health and Long-Term Care (Ministry) recognized the OMA as the exclusive bargaining agent of physicians, and both parties agreed, among other things, to consult and negotiate in good faith on physician compensation and related accountability.

The Ministry is responsible for establishing policies and payment models to fairly compensate physicians, while at the same time ensuring that taxpayer funds are spent effectively. Through various divisions with an annual budget of about $27.9 million and 260 staff, the Ministry administers payments to physicians and ensures billings are appropriate. Its Negotiations and Accountability Management Division has the main role in overseeing this billing process.

Physicians in Ontario can bill under three major models:

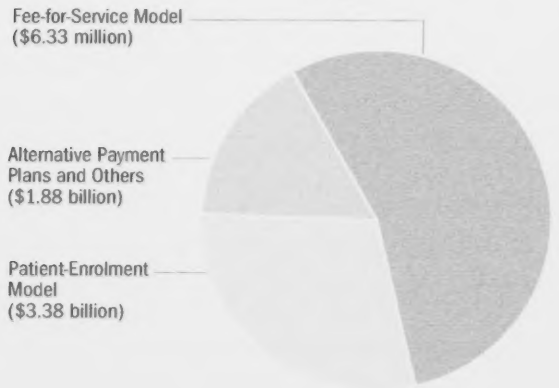
- The first is a **fee-for-service model** (fiscal year 2015/16—$6.33 billion) under which physicians are compensated based on a standard fee for each service they perform. They bill using fee codes in OHIP's Schedule of Benefits. This model has been the principal way that physicians bill since 1972. It is widely used today, mainly by specialists.
- The second is a **patient-enrolment model** (fiscal year 2015/16—$3.38 billion) under which physicians form group practices (such as Family Health Organizations and Family Health Groups) and are paid for the number of patients enrolled with them, and for a predetermined basket of services the group provides to those patients. The objective is for family physicians to offer their patients more comprehensive and continuous care. Remunerations might also include a combination of bonuses, incentives and other payments for additional work including fee-for-service payments for services outside the basket of services. Family physicians could opt into one of the patient-enrolment models

or continue with fee-for-service. This type of model generally allows family physicians to earn more than under the fee-for-service model. As of March 31, 2016, 8,800 out of 14,100 family physicians had opted for one of the patient-enrolment models (Family Health Organizations and Family Health Groups accounted for 92% of the total number of enrolled patients). The remaining family physicians mainly bill fee-for-service or are paid through alternative payment plans.

- The third is **alternative payment plans** (fiscal year 2015/16—$1.88 billion) and other contracts with hospitals and physician groups to provide specific services. In addition to the $1.88 billion, approximately $1.2 billion was paid to alternative-payment-plan physicians as fee-for-service, which is included in the $6.33 billion paid under the fee-for-service model mentioned above. **Figure 1** provides a breakdown of payments.

Over the last five years, Ontario physicians have been among the highest paid in Canada. While one reason for this is that Ontario has the third-highest population-per-physician ratio, it also compensates more physicians than other provinces with models such as the patient-enrolment model—a more expensive model than fee-for-service. Over the years, physicians were paid additional incentives even after reviews concluded that some of these payments likely did not improve the quality of patient care. For example, in 2014/15, each family physician in patient-enrolment models received $3 per patient each month, which cost $364 million on top of base capitation payments (the fixed amount paid for each enrolled patient, regardless of patient visits or services actually performed).

Figure 1: Payments to Ontario Physicians, 2015/16
Source of data: Ministry of Health and Long-Term Care



However, use of patient-enrolment models has still not translated into increased access to care as measured by wait times—57% of Ontarians waited two days or more to see their family physician in 2015/16 as compared to 51% in 2006/07. Ministry survey data for the period October 2014 to September 2015 showed that approximately 52% of Ontarians found it difficult to obtain medical care in the evening, on a weekend or on a public holiday without going to a hospital emergency department.

Our review of Ministry data noted that in 2014/15, each physician in a group practice called a Family Health Organization worked an average of 3.4 days per week, while each physician in a group practice called a Family Health Group worked an average of four days per week. In 2014/15, 60% of Family Health Organizations and 36% of Family Health Groups did not work the number of weeknight or weekend hours required by the Ministry. As well, many patients are visiting walk-in clinics for care that could normally be provided by family physicians. The Ministry's survey data for October 2014 to September 2015 showed that approximately 30% of Ontarians had visited a walk-in-clinic in the last 12 months.

The Ministry is also having challenges managing and controlling the use of services billed under the fee-for-service model. One way to achieve some cost savings here is by encouraging physicians, based on clinical research, to reduce medically unnecessary services. However, the Ministry has had limited success with this and in 2015 implemented across-the-board cuts to physician payments, which is not a sustainable way to contain costs.

Another way to manage costs is to adjust fee-for-service rates based on new clinical practices—an area where Ministry attention is still needed.

Further, the Ministry's oversight and recovery of inappropriate fee-for-service payments is weak and is hindered by its lack of an inspection function and ineffective enforcement of payment recovery mechanisms.

Some of our more detailed findings are as follows:

- **Patient-enrolment models for compensation of family physicians are not meeting original objectives and pose management issues for the Ministry.** There were four objectives when Ontario decided to implement the more expensive patient-enrolment model: to increase patient and physician satisfaction, cost-effectiveness, access to care, and quality and continuity of care.
  - The objective of increasing patient satisfaction with family physicians has been achieved, but at a cost: the Ministry estimates that for the year ended March 31, 2015, physicians were paid for base capitation under Family Health Organizations approximately $522 million that would not have been paid under a fee-for-service model, in part because physicians were compensated for approximately 1.78 million patients that they had enrolled, but did not treat.
  - Although the number of Ontarians who have a family physician has risen by 43% since 2006/07 (from 7.4 million to 10.6 million in 2015/16), it has not translated into increased access to care as measured by wait times, as previously noted.
  - The Ministry is not able to demonstrate whether patient-enrolment models have improved quality and continuity of care, and its cost-effectiveness evaluations are inconclusive. The Ministry's billing system indicated that 40% of enrolled patients went to walk-in clinics or other family physicians outside the group in which they were enrolled. As well, an estimated 27% of enrolled patients have chronic health conditions and regularly seek primary care outside their physician group, contrary to best practices. This resulted in duplicate payments of $76.3 million cumulatively over the five years up to fiscal 2014/15. The Ministry does not recover these payments.
  - High use is being made of emergency-department services for non-urgent care that could be provided by family physicians. During 2014/15, about 243,000 visits were made to emergency departments for conditions that could have been treated in a primary care setting. The Ministry estimated these visits cost $62 million, of which $33 million was incurred by patients enrolled in Family Health Organizations that are compensated using the patient-enrolment model. The Ministry does not recover this money from these patients' family physicians.
  - In 2014/15, 1.78 million (or 33%) of the 5.4 million patients enrolled with a Family Health Organization did not visit their family physician at all, yet these physicians still received a total of $243 million for having them enrolled. Most of the patients who did not visit their physicians were males between the age of 20 and 29.
- **Ministry faces challenges controlling costs under the fee-for-service model.**
  - **Under the 2012 OMA Representation Rights Agreement, the Ministry and the OMA must consult and negotiate in good faith to establish physician compensation.** Fee-for-service claims have been growing at an annual rate of 3.3%, despite the Ministry's targeted rate of 1.25%. In a taxpayer-funded system, the decision to provide a service should be based on whether it is medically necessary—a professional judgment that should also be informed by medical research studies. The Ministry has not been successful in achieving a reduction of medically unnecessary

services. It initiated an across-the-board payment reduction because it did not reach an agreement on future billing amounts and rules with physicians.

- **Ministry does not have the information it needs to assess whether the large variances in gross fee-for-service payments to the same type of specialists are reasonable.** We noted that large variances exist in gross payment per physician (before deduction of office expenses and overhead) within certain specialties. For example, in 2014/15, ophthalmologists at the higher end of the pay range received an average of about $1.27 million each—close to 130%, or over $710,000, higher than the approximately $553,000 received by ophthalmologists in the middle of the pay range. However, the Ministry does not have complete information on physicians' practices and profit margins to help it analyze the disparities.
- **There is a high disparity of gross payment per physician between specialists.** The fee-for-service model in Ontario favours procedural specialists (those who perform procedures such as diagnostic testing or surgery), who also generate a high volume of services. For example, vascular surgeons, who perform on average 12,230 services per year, would be paid an average of $43 per service, whereas pediatricians average 6,810 services and would be paid an average of $31 per service. To assess reasonableness, and the impact of technology on service levels, the Ministry needs to obtain more information on physicians' practices, including operating costs and profit margins.

- **Ministry lacks a cost-effective enforcement mechanism to recover inappropriate payments from physicians.** The Ministry has had no inspector function since 2005. Its current recovery process on inappropriate billings is lengthy and resource-intensive: the onus is on the Ministry to prove that the physicians who bill on the honour system are in the wrong, not on the physicians to prove they are entitled to the billing. Unless a physician repays amounts voluntarily, it is very difficult for the Ministry to recover inappropriate payments. Legislative changes in 2005 established a Physician Payment Review Board. Alberta and British Columbia can order a physician to repay overpayments without an order from a similar board.
- **Ministry does not investigate many anomalous physician billings.** The Ministry did not investigate many instances where physician billings exceed the standard number of working days and expected number of services. We noted that, for example, nine specialists each worked over 360 days in 2015/16; six of these worked 366 days (2016 was a leap year). A further example includes one respirologist who worked 361 days in 2015/16 and billed the province $1.3 million, close to five times higher than the upper expected limit and billed for close to 12,400 services that year, about four times the upper expected range for the same billing category. Other examples of anomalies:
  - One cardiologist worked 354 days in 2015/16 and billed the province $1.8 million, which is three times higher than the upper expected limit for physicians in the same billing category (procedural specialists). This specialist provided over 13,200 services that year, 2.4 times the upper range of expected services for physicians in the same billing category.
  - One diagnostic radiologist worked 313 days in 2015/16 and billed the province $1.7 million, which is 2.8 times the upper expected limit for physicians in the same billing category (diagnostic specialists). This specialist provided over 57,400 services that year, 5.6 times the upper range

of expected services for physicians in the same billing category.

While the Ministry had initiated some investigations on its own, the investigations were not done in a timely manner. For example, one cardiologist billed $2.5 million during 2014/15 for performing over 68,000 services, more than six times the number of services rendered by the average cardiologist. However, the Ministry had not concluded its investigation at the time of our audit.

- **Ministry does not follow up on many cases of possible inappropriate billings by physicians.** Since the beginning of 2013, the Ministry has not actively pursued recovery of overpayments in proactive reviews; it was recovering approximately $19,700 in 2014 and nothing in 2013 and 2015. In prior years, recoveries were well over a million dollars. As well, the Ministry no longer follows up on all physicians who have billed inappropriately in the past. This is a concern since in our analysis of 34 physicians who billed inappropriately, 21 had previous instances of inappropriate billing. In addition, the Ministry acknowledged that some specialists are systematically billing one particular code inappropriately. We identified about 370 specialists who were billing this code inappropriately and estimated that between April 1, 2012, and March 31, 2016, the overpayment amounted to approximately $2.44 million.
- **Ministry has had minimal success in controlling excessive preoperative cardiac testing.** The Ministry targeted savings of $43.7 million for 2013/14 by reducing the number of unnecessary preoperative cardiac tests, but actual savings were only $700,000. The Ministry later calculated that for fiscal year 2014/15 alone, approximately $35 million was paid to physicians for up to 1.15 million preoperative cardiac tests, which may not have been medically necessary, for low-risk surgeries.
- **Concerns of the Ontario Association of Cardiologists (Cardiologists Association) about cardiac-care spending published in an open letter to the Auditor General were reasonable.** The results of our review of the concerns are detailed in this report. In October 2014, the Ministry became aware of fee-for-service claims for two cardiac rhythm monitoring tests that were inappropriately claimed and paid to physicians. The Ministry determined that approximately 70 physicians were overpaid by at least $3.2 million between April 2012 and May 2015. However, at the time of our audit, the Ministry was not planning to recover any of this amount. In October 2015, the Ministry made the fee for cardiac-ultrasound services the same regardless of whether or not a cardiologist was physically on site. Prior to this, although a cardiologist could have supervised services via telephone or video-conference off site, a cardiologist physically present for the services would have been paid more by being on site. Our review of the Ministry's data for the period October 2015 to March 2016 in comparison to the same prior-year period found that the increase in amount paid by the Ministry and the volume of services conducted was minimal—less than 0.1%. However, we believe that the Ministry should continue to monitor the volume of these services provided to ensure that only necessary services are being conducted with proper supervision.
- **Taxpayers continue to pay significant amounts for the rising cost of physician medical liability protection.** A joint effort between the Ministry, the OMA and the Canadian Medical Protective Association to review the legal context surrounding the dramatic increase in medical malpractice trends is long overdue.

This report contains 14 recommendations, consisting of 29 actions, to address our audit findings.

OVERALL MINISTRY RESPONSE

The Ministry of Health and Long-Term Care (Ministry) is committed to working collaboratively with its partners, making evidence-based decisions with a focus on value and quality for services provided in meeting the needs of Ontarians, and making improvements to sustain the health-care system for generations to come. The Ministry appreciates the comprehensive audit conducted by the Auditor General. The Ministry welcomes the recommendations contained in the report as the Ministry has been limited in its ability to make effective improvements due to the current legislative barriers and negotiations climate. These recommendations will be a significant contribution to support our actions to strengthen accountability and improve access to health-care services.

2.0 Background

2.1 Overview of Ontario Health Care

Since 1972, the Ontario Health Insurance Plan (OHIP) has provided Ontario residents with provincially funded health coverage. OHIP, established under the *Health Insurance Act*, pays for a wide range of health-care services, from visits to a family physician in private practice to hospital surgery performed by a specialist. The Ministry of Health and Long-Term Care (Ministry) funds OHIP, which pays family physicians and specialists (collectively called physicians) for all insured medical services they provide to all eligible Ontarians.

What follows is a summary of the principal players in Ontario health care.

Physicians

Although the services they provide to patients are paid for by the province, physicians are not government employees; they operate as independent service providers. As of March 31, 2016, there were about 30,200 physicians in Ontario actively billing OHIP for services rendered. About 14,100 were family physicians, while the remaining 16,100 were specialists in close to 40 different areas of practice, such as cardiology and psychiatry.

It requires at least eight years of post-secondary education and training to become a physician in Ontario, depending on specialty. Family physicians are certified after an examination by the College of Family Physicians of Canada, while specialists must write an examination administered by the Royal College of Physicians and Surgeons of Canada before they can be certified. Upon entering medical practice, physicians recite the Hippocratic Oath, which requires them to preserve all human life, to put the health of their patients first, and to renounce self-interest in the treatment of their patients.

Patients

Ontario's physicians treat the more than 13 million residents eligible for health-care coverage under OHIP. Ontario residents must have a valid OHIP card to receive provincial health-care services at no personal cost. To be eligible for an OHIP card, applicants must be Canadian citizens or have eligible immigrant status, make Ontario their primary place of residence, and have resided in Ontario for at least 153 days in a 12-month period. Patients may choose their physicians. According to Statistics Canada, the percentage of Ontarians aged 65 and over will increase significantly over the next few decades, from 16% in 2015 to over 25% by 2041. About 10% of Ontario's population will be over 80 years old by 2041, compared to only 4% in 2013. This is important, because as people get past a certain age, health-care spending generally increases exponentially.

Ministry of Health and Long-Term Care (Ministry)

The Ministry administers OHIP through several divisions. In the fiscal year ending March 31, 2016,

the Ministry estimated that it has about 260 staff who administer payments to physicians, for a total administrative cost of about $27.9 million. The Ministry is also responsible for setting policies establishing various payment models to compensate physicians in providing care to Ontarians. It also conducts reviews on physician billings proactively, mainly based on an analysis of billing data, as well as reactively, largely based on complaints it receives.

College of Physicians and Surgeons of Ontario (College)

The College regulates the practice of medicine in Ontario under the *Regulated Health Professions Act, 1991* and the *Medicine Act, 1991*, to protect and serve the public interest. It has the authority to self-regulate the medical profession, and a physician must be a member of the College before he or she can practise in Ontario. The College's duties include physician registration, monitoring and maintaining standards of practice, investigating complaints, and conducting disciplinary hearings.

Ontario Medical Association (OMA)

The OMA was founded in 1880 as a voluntary association to represent Ontario physicians' political, clinical and economic interests. It is governed by a council and a board of directors. The Ministry, through the OMA Representation Rights and Joint Negotiation and Dispute Resolution Agreement (OMA Representation Rights Agreement) dated December 2012, recognizes the OMA as the exclusive bargaining agent of physicians. Under the agreement, the Ministry and the OMA agreed, among other things, to consult and negotiate in good faith for the purpose of establishing physician compensation for physician services and related accountability in the publicly funded health-care system.

Canadian Medical Protective Association (Association)

Every physician in Ontario is required to obtain and maintain professional liability protection. The Association, a not-for-profit organization, collects membership fees and assists member physicians who face medical-legal difficulties arising from their practice of medicine. It also provides compensation to patients harmed by negligent care. Although they can choose other liability-protection providers, almost all Ontario physicians belong to the Association. The province reimbursed $237 million, or about 84%, of membership fees that physicians paid the Association in 2015.

The Physician Payment Review Board (Board)

The Board, established in 2010 by the *Health Insurance Act*, is an independent adjudicative tribunal that conducts hearings on billing disputes between physicians and the Ministry at the request of either. As of September 2016, the Board comprises 27 members—11 of them are physicians recommended by the Ministry, another nine are physicians recommended by the OMA, and the remaining seven are public representatives. The Board hears only those payment disputes that cannot be resolved between a physician and the Ministry. After a hearing, the Board may order the physician to reimburse the Ministry if it has concluded that an overpayment was made, or order the Ministry to pay the physicians if it has concluded that an underpayment was made. Since its establishment, the Board has formally heard five cases, all of which were decisions in favour of the physicians.

2.2 Compensation Systems for Physicians

The Ministry compensates Ontario physicians using two broad payment models, as follows.

2.2.1 Fee-for-Service Payment Model

Since the start of publicly funded health care in 1972, the fee-for-service model has been the principal way Ontario physicians bill the province for the services they provide. It is still widely used today, especially by specialists. Under fee-for-service,

physicians are compensated based on a standard fee for each service they perform. The medical services covered and the standard fees payable are detailed in OHIP's Schedule of Benefits, which includes hundreds of fee categories pertaining to over 7,000 fee codes. Although there are hundreds of fee categories, most physicians, especially those with consultation-based office practices, typically bill the same group of five to 10 fees within their specialties because they usually provide the same cluster of services over time. The Schedule of Benefits, laid out under Regulation 552 of the *Health Insurance Act*, also outlines various billing requirements and conditions that must be met before payment is made.

2.2.2 Patient-Enrolment Models

Alternative funding arrangements are any kind of government payments to physicians not made on a fee-for-service basis. For example, instead of receiving a set fee solely for each service performed, physicians might be paid for the number of patients enrolled with them, and for the predetermined basket of services they provide to those patients. Payment might also include a combination of bonuses, incentives and other payments for additional work.

Since the late 1990s, the Ministry began a wide-ranging reform of the primary care system (the part of the medical system that represents the patient's first point of contact with non-specialist, non-emergency care). The reform was meant to address:

- poor and fragmented access to care—a growing number of Ontarians were living longer, including people with multiple chronic illnesses like diabetes, congestive heart failure, osteoporosis and cancer, whose treatment required that they be seen by the same physician over a continuous period of time;
- a lack of communication and information-sharing across the health-care sector;
- financial incentives built into the fee-for-service model that could lead to provision of unnecessary medical services; and
- a shortage of family physicians in Ontario during the 1990s—the OMA noted that there was a shortage of primary care physicians and that primary care was not viewed as a desired specialty by medical students.

Under patient-enrolment models, patients are attached to, and receive primary care from, the same group of family physicians over a continuous period of time. The treatments they receive are intended to be comprehensive rather than based on one-time or occasional needs. **Figure 2** compares the two payment models. Family physicians could opt into one of the patient-enrolment models or continue with fee-for-service.

Since the reform of the primary care system, many family physicians have chosen patient-enrolment models because they could generally earn more than with fee-for-service, and because the models allowed them to offer their patients more comprehensive and continuous care.

As of March 31, 2016, there were about 14,100 family physicians in Ontario, of which 8,800 had opted for one of the patient-enrolment models. **Figure 3** provides a breakdown of the number of family physicians and enrolled patients by model. Most family physicians who opted for patient-enrolment chose either the Family Health Organization or Family Health Group models; together, these two models account for 87% of the 8,800 family physicians in the patient-enrolment model and 92% of the 10.6 million enrolled patients. Most of the remaining family physicians continue to bill OHIP on a fee-for-service basis. Patient-enrolment models include a number of payment types negotiated between the Ministry and the OMA over time. Selected payment types are shown in **Figure 4**.

Payment methods for Family Health Organizations and Family Health Groups are shown in **Figure 5**. In a Family Health Organization, base capitation payments (the fixed amount paid for each enrolled patient, regardless of patient visits or services actually performed), bonuses and incentives account for approximately 80% of a physician's compensation, with the remaining 20%

as fee-for-service. Family Health Groups work the opposite way, with fee-for-service accounting for 80% of compensation, and capitation payments, incentives and other payments accounting for the remaining 20%.

2.3 Payments Made to Ontario Physicians

In 2015/16, Ontario paid about 30,200 physicians a total of $11.59 billion. About $6.33 billion of that (55%) was paid on a fee-for-service basis,

Figure 2: Comparison of Patient-Enrolment and Fee-for-Service Models

Source of data: Ministry of Health and Long-Term Care

	Patient Enrolment	Fee-for-Service
Contract-based	Yes. An agreement is signed between the Ministry, a practice of at least three physicians* and the OMA.	No
Patient enrolment	Patients are enrolled with a family physician in a group practice. Patients must agree to seek primary care from that practice.	Not required
Physician practice size	At least three physicians,* although patients enroll with one of the practice's physicians.	Sole practitioner
Compensation structure	• Base capitation payment: Amount varies with number and types of bundled services physicians agree to provide to enrolled patients. • Bonus, incentives, premiums and/or other payments: Amount varies with number and types of services physicians perform in specific areas, such as preventive care and diabetes management. • Fee-for-service: Varies with number and types of services physicians perform outside of the basket of services for patients and/or services to patients not enrolled in the practice.	A fee is paid for each service provided, based on OHIP's Schedule of Benefits.
Treatment focus	Comprehensive and continuous primary care to enrolled patients, including: • health assessments; • diagnosis and treatment; • primary reproductive, mental health or palliative care; • support for hospital, home and long-term-care facilities; • service co-ordination and referral; • patient education and preventive care; and • arrangements for 24/7 availability of physician. Management of chronic illnesses like diabetes, congestive heart failure, osteoporosis and cancers that require medical treatment and physician monitoring over a continuous period of time.	Episodes of acute illness with rapid onset that can be resolved in a short period (e.g., colds and flu to strokes) as well as chronic illnesses.

* An exception to the three-physician minimum requirement of the patient-enrolment models is the Comprehensive Care model. As of March 31, 2016, about 400 physicians were billing under this model.

Figure 3: Family Physicians and Patients in Patient-Enrolment Models as of March 31, 2016

Source of data: Ministry of Health and Long-Term Care

Patient-enrolment Model	# of Physician Groups/Practices	# of Physicians	# of Enrolled Patients	% of Enrolled Patients
Family Health Organization	470	5,060	6,560,900	62
Family Health Group	230	2,620	3,156,700	30
Other*	110	1,130	872,700	8
Total	**810**	**8,810**	**10,590,300**	**100**

* Includes about 10 smaller patient-enrolment models accounting for about 13% of family physicians and 8% of total enrolled patients.

Figure 4: Selected Types of Payments under Patient-Enrolment Models for Family Physicians
Prepared by the Office of the Auditor General of Ontario

Type of Payment	Description
Base capitation payment	Fixed amount paid for each enrolled patient, based on age and sex, for providing services listed in the contract, regardless of the number of services performed or the number of visits by the patient (e.g., for Family Health Organizations ranges from $62 to $548 a year per patient).
Access bonus	Approximately 20% of base capitation payment is held back and can be earned by physicians when their enrolled patients do not seek care for the services listed in the contract outside the group with which the patients are enrolled.
Comprehensive-care capitation fee	Fixed amount paid to physicians for each enrolled patient, based on age and sex, for choosing to provide comprehensive care for their enrolled patients.
Complex enrolment fee	Fixed amount paid for enrolling a "hard-to-care-for" patient.*
Enhanced fee-for-service	Physicians are paid an additional 10% more than the Schedule of Benefits amount for the list of fee codes specified in their agreement.
Fee-for-service	Physicians bill OHIP for the established fee per the OHIP Schedule of Benefits for each service provided to a patient.
Incentives	Additional payments to physicians for providing specific services (e.g., patient care on weekends, preventive care and diabetes management); to encourage certain activities (e.g., enrolment of certain types of patients, such as "hard-to-care-for" patients); and for continuing medical education courses.
Shadow billing	An incentive the Ministry provides to physicians on base capitation to submit a record of the services in their predetermined basket of medical services that they have actually performed. Physicians on base capitation can bill OHIP and be paid a percentage of the established fee-for-service amount for patient services listed in the contract; physicians are generally eligible for either shadow billing or enhanced fee-for-service.

* "Hard-to-care-for" patient refers to a patient with complex needs and/or more than one medical condition.

while about $3.38 billion (29%) was paid through patient-enrolment models. The remaining $1.88 billion (16%) was paid through alternative payment plans and other contracts with hospitals and physician groups to provide specific services, including physician training, research, emergency and/or other care in hospitals, and working in remote areas. The 2015/16 total is 20% higher than the $9.64 billion paid to all physicians in 2009/10 (see **Figure 6**). **Figure 7** provides a breakdown of the number of Ontario physicians and associated payments in 2014/15.

Even though the Ministry has been investing heavily in patient-enrolment models, we noted that the amount paid through fee-for-services has also increased by almost 20%, from $5.33 billion in 2009/10 to $6.38 billion in 2014/15, primarily as a result of the increased number of physicians who billed fee-for-service, from about 24,200 in 2009/10 to 28,100 in 2014/15.

The Ministry also reimburses physicians for most of the annual medical liability protection premiums they pay to the Canadian Medical Protective Association. In 2015, that reimbursement was $237.3 million, or about 84% of the total $284.3 million in premiums paid.

2.4 The Physician Services Agreement

The Physician Services Agreement (Agreement), negotiated by the Ministry and the OMA, outlines working conditions and remuneration for physicians,

Figure 5: Payment Methods for Selected Patient-Enrolment Models for Family Physicians

Prepared by the Office of the Auditor General of Ontario

Type of Patient-Enrolment Model	Start Date	How Family Physicians Are Paid
Family Health Organization	2006	**Base and comprehensive-care capitation fee, shadow billing and incentives for enrolled patients** Base capitation fee covers 150 listed services. Shadow billing is paid at 15% of the established fee-for-service value. Physicians also receive additional payments, including: • fee-for-service for any service not listed in the contract, and for all services provided to non-enrolled patients; • incentive payments for services such as preventive care, diabetes management, after-hours service and enrolling unattached patients; • complex enrolment fees for "hard-to-care-for" patients*; • $5,000 to $15,000 per year for working in a rural community; and • $12,500 to $25,000 per year for practices with at least five physicians to help pay for an office administrator.
Family Health Group	2003	**Enhanced fee-for-service and incentives for Ministry-assigned patients and enrolled patients, as well as comprehensive-care capitation fees for enrolled patients** Enhanced fee-for-service is 110% of the OHIP-listed fee-for-service amount for 33 comprehensive-care listed services. Physicians also receive additional payments, including: • complex enrolment fees for "hard-to-care-for" patients*; and • incentive payments for services such as preventive care, diabetes management, after-hours services and enrolling unattached patients.

* "Hard-to-care-for" patient refers to a patient with complex needs and/or more than one medical condition.

including the introduction of new compensation models and/or revisions to existing models.

Since 2004, three Agreements have been negotiated between the Ministry and the OMA, with the 2008 agreement providing the highest compensation increases. **Appendix 1** provides a summary of the increases and decreases in physician compensation contained in these Agreements.

The Agreement is generally negotiated every four years, and the last one expired on March 31, 2014. In the absence of an Agreement, the December 2012 OMA Representation Rights Agreement requires the Ministry to follow a specified "Joint Process" which includes consultation and negotiation with the OMA before making any changes that might affect physician compensation. In 2015, after consulting the OMA, the Ministry moved forward with unilateral changes—across-the-board fee cuts of 2.65% in February and 1.3% in October—even though the OMA did not agree to them. During the period of our audit, therefore, the Ministry and the OMA had no Agreement in place. A tentative settlement was reached on July 7, 2016, which a majority of OMA members rejected in a vote on August 14, 2016.

2.5 Different Physician Compensation Models in Other Jurisdictions

Physician compensation models differ all over the world, and each has its own advantages and disadvantages; there is no one optimal model. As a result, a mixed, blended model approach is most commonly used. Refer to **Appendix 2** for a comparison of prevalent funding models used globally.

Figure 6: Total Expenditures[1] to Ontario Physicians by Type, 2009/10–2015/16 ($ billion)

Source of data: Ministry of Health and Long-Term Care

Note: A similar breakdown by type is not available prior to fiscal year 2009/10.

1. Excludes the Ministry's payments for Medical Liability Protection.
2. This category is made up of several smaller individual program expenditures to hospitals and/or groups of physicians.
3. Includes fee-for-service expenditures to primary care physicians.
4. The total expenditure for the 2015/16 fiscal year had not been finalized at the time of our audit because the Ministry allows physicians six months to submit their billings for services rendered during that year.

Figure 7: Number of Ontario Physicians and Associated Payments by Payment Type, 2014/15

Source of data: Ministry of Health and Long-Term Care

Total Number of Physicians: 29,410 Total Payments: $11.61 billion*			
Total # of Family Physicians: 13,710 Total Payments: $4.17 billion		**Total # of Specialists: 15,700 Total Payments: $6.82 billion**	
Patient Enrolment	**Fee-for-service and Others**	**Alternative Payments**	**Fee-for-service**
Physicians: 8,320	Physicians: 5,390	Physicians: 5,970	Physicians: 9,730
$3.09 billion	$1.08 billion	$2.50 billion	$4.32 billion

* This amount includes approximately $620 million that the Ministry paid the physicians through other contracts such as for providing on-call services at hospitals.

3.0 Audit Objective and Scope

The objective of our audit was to assess whether the Ministry of Health and Long-Term Care (Ministry) has effective systems and procedures in place to:

- ensure that fees paid to and recovered from physicians are appropriate and in accordance with applicable legislation, regulations and agreements; and
- measure and report on how effectively physician payment models meet the needs of Ontarians.

Senior Ministry management reviewed and agreed to our audit objectives and associated criteria. We conducted our audit fieldwork from October 2015 to May 2016.

Our audit work was conducted primarily at the Kingston and Toronto offices of the Ministry's Negotiations and Accountability Management Division. In conducting our audit, we reviewed relevant documents, analyzed information, interviewed appropriate Ministry staff, and reviewed relevant research from Ontario and other Canadian provinces, as well as jurisdictions in other countries. The majority of our file review went back three to five years, with some trend analysis going back as far as 10 years.

We also reviewed data from the Ministry's information systems on physician billing, and asked the Ministry's Health Analytics Branch to perform certain analyses of this data. As part of the annual audit of financial statements performed by our Office on the Public Accounts of Ontario, we tested key application controls and information technology general controls in the Ministry's medical-claims payment system. We considered the results from that annual financial-statement audit in determining the scope of this value-for-money audit.

We met with representatives of the Institute for Clinical Evaluative Sciences, an independent, not-for-profit corporation that uses Ontario health data to evaluate health-care delivery and outcomes, and relied on some of the data analyses it performed.

In addition, we talked to representatives from stake¬holder groups, including the College of Physicians and Surgeons of Ontario, the Ontario Medical Association, and the Physician Payment Review Board, about their perspectives on physician billing and accountability. We discussed legal liability issues with officials from the Canadian Medical Protective Association.

In an effort to better understand the negotiation process and status of the 2014 Physician Services Agreement, we met with the conciliator appointed to assist in advancing the negotiations. We also met with the former legal counsel for the Honourable Peter deCarteret Cory, who carried out a 2005 review of the Medical Audit System in Ontario, to discuss that review's recommendations. In addition, we engaged a medical professional with knowledge of physician compensation to advise us.

Although we mention the Canadian Medical Protective Association (Association) in our report, we did not have access to its internal data; instead, we relied on available external data and additional information provided to us by the Association and the Ministry. We also relied on physicians employed by the Ministry and our own medical adviser for any interpretations of clinical data.

In June 2016, the Ontario Association of Cardiologists (Cardiologists Association) published an open letter to the Auditor General regarding its specific concerns over cardiac-care spending. (**Appendix 3** contains the letter.) In addition to our audit work already covered in the cardiac-care area, we performed additional work based on the information provided by the Cardiologists Association. The result of our work in this area and additional work to address the Cardiologists Association's concerns is reported in **Section 4.7**.

As part of our planning for this audit, we reviewed the Ministry's January 2013 internal audit report on the review of security controls over the distribution of physician reports containing personal health information, and considered its findings in determining the scope of our audit.

We also asked a selected number of physicians, chosen on a random basis, to complete our survey on their opinions regarding physician billing and compensation as well as the health system overall. About 35% of them responded to our survey.

Finally, we considered the relevant issues reported in our 2011 audit related to patient-enrolment models (see the section entitled **Funding Alternatives for Family Physicians** in our *2011 Annual Report*) and incorporated them into our audit work.

4.0 Detailed Audit Observations

4.1 Ontario Physicians among the Highest Paid in Canada

Over the last five years, Ontario physicians have been among the highest paid in Canada. Data from the Canadian Institute for Health Information shows that the annual average gross clinical payment (payment for health-care services) per physician in Ontario in 2014/15 was approximately $363,800, just $2,000 below the highest average payment in Alberta and about $25,200 above the Canadian average of $338,600 for the same year. **Figure 8** compares the average gross clinical payment per physician among six provinces with a population of over a million.

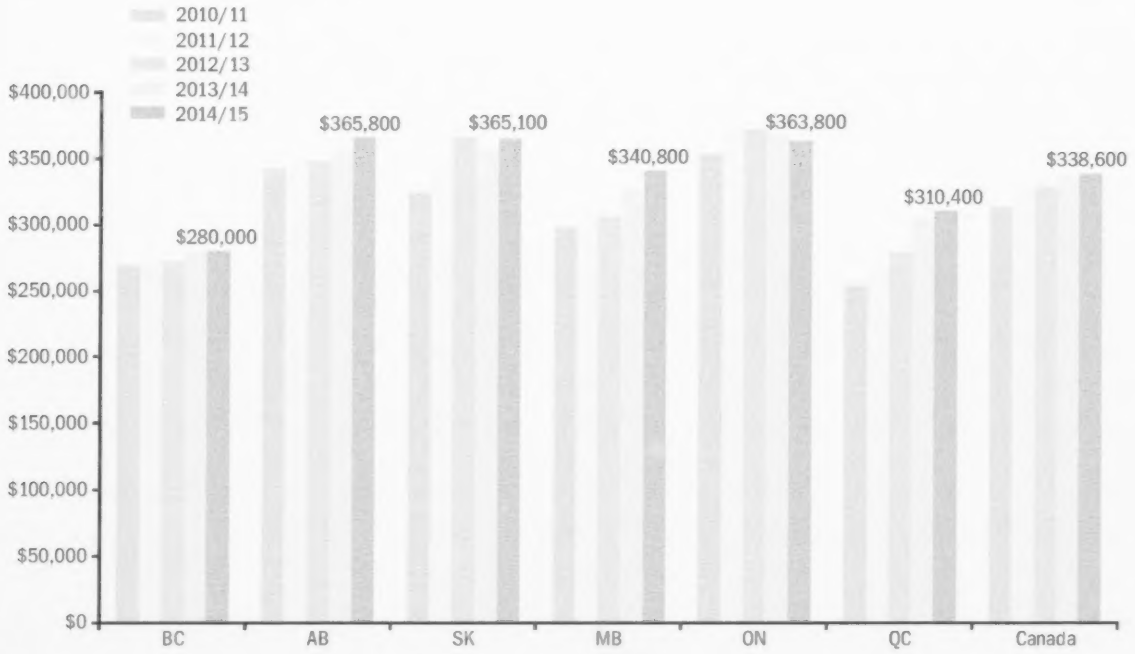
Two main reasons contributed to the relatively high pay physicians receive in Ontario:

- Ontario has the third highest population to physician ratio (**Figure 9**): this leaves each physician with a relatively large number of patients and medical services to bill for.
- Ontario has the largest portion (approximately 36%) of its physician compensation in the form of alternative funding arrangements such as patient-enrolment models. Saskatchewan is second highest at 35%, Manitoba is third highest at 29%, and Alberta is the lowest at 13%. As we explain in **Section 4.2**, physicians earn significantly more in patient-enrolment models than in fee-for-service models.

While about half of the physicians who responded to our survey on billing, compensation and the overall health system indicated that they believe they are reasonably compensated in comparison to their peers within their specialty in Ontario or in other Canadian provinces, the other half disagreed. Some respondents commented that inflation over the last decade has lowered physicians' net income significantly. Many physicians

Figure 8: Average Gross Clinical Payment per Physician, Large Provinces, 2010/11–2014/15

Source of data: Canadian Institute for Health Information



Note: Provinces with population of over 1 million are included. Payments are rounded to the nearest hundred.

Figure 9: Comparison of Population per Physician, Large Provinces and Canada, 2014/15
Source of data: Canadian Institute for Health Information

Province/Canada	Average # of Persons per Physician
Saskatchewan	510
Manitoba	490
Ontario	**455**
British Columbia	431
Alberta	422
Quebec	414
Canada	439

Note: Provinces with population of over 1 million are included.

expressed that because fees paid to physicians in Ontario are relatively low by Canadian standards, they treat more patients and perform more procedures than physicians in higher-paid provinces, in order to earn about the same compensation. A large number of physicians also stated that patient demand has increased the need for more medical services, and this is a key factor driving the increase in physician billings.

4.2 Significant Investment in Patient-Enrolment Models but Most Objectives Not Met

The patient-enrolment model, when it was introduced as part of the Ministry's primary care reform in the late 1990s, had the following four main objectives:

- Increase access to care;
- Increase quality and continuity of care;
- Increase patient and physician satisfaction; and
- Increase cost-effectiveness.

Our audit found that three of these objectives have not been met, and/or measurable targets have not been set to demonstrate how and to what extent Ontario's population receives better-quality medical care under patient-enrolment models. The Ministry's 2014–15 survey indicates that patients are generally satisfied with interactions with their family physician (see **Appendix 4**), and this has remained the same over the last three years. However, the Ministry has not recently assessed the satisfaction of primary care providers such as family physicians with patient-enrolment models. When the sample of physicians we surveyed were asked to what extent Ontario needs to change the way physicians are compensated in order to achieve a sustainable health-care system, about 55% said no change or some change was needed, while about 42% said a lot of change was needed or the system should be completely revamped. A small portion, 3%, had no opinion.

The issues primarily surrounding the objectives that have not been met are discussed in the following sections.

4.2.1 Patient-Enrolment Models Significantly More Expensive Than Fee-for-Service Models

In 2014/15, the Ontario government invested approximately $1.4 billion more in patient-enrolment models than the costs would have been under the traditional fee-for-service model. The additional cost had increased by 55% from $907.6 million in 2010/11, as shown in **Figure 10**. In March 2016, the Ministry estimated, at our request, the additional cost of the patient-enrolment models for the fiscal year 2014/15. This $1.4 billion additional cost represented close to 35% of the total OHIP payments to all family physicians in the same year.

Figure 10: Estimated Additional Cost of Patient-Enrolment Models, 2010/11–2014/15
Source of data: Ministry of Health and Long-Term Care

2010/11	2011/12	2012/13	2013/14	2014/15
$907.6 million	$1.168 billion	$1.280 billion	$1.395 billion	$1.404 billion

Note: Shows the Ministry's estimate of additional cost over the cost of the fee-for-service model. The Ministry's estimate is based on two assumptions:

1. All family physicians who opted into a patient-enrolment model submitted all their shadow billings to the Ministry; and
2. Physicians' billing pattern and behaviour did not change under patient-enrolment models.

This difference highlights that patient-enrolment models are significantly more expensive than traditional fee-for-service models. According to the Ministry's most recent estimate, in 2014/15, a family physician who belonged to a Family Health Organization earned an annual gross revenue of $420,600, and one who belonged to a Family Health Group earned an average of $352,300. Both of these average salaries are significantly higher than the gross billing of $237,100 physicians would earn, on average, under the traditional fee-for-service model. Yet, the base capitation payments that physicians receive before they actually see any of the patients they enroll were originally designed to be cost-neutral, or about the same as if the services were being provided on a fee-for-service basis.

We noted that for the 2014/15 fiscal year, of the $1.4 billion additional cost mentioned previously, approximately $1.1 billion consisted of payments to Family Health Organizations. In that year, the Ministry paid approximately $1.039 billion in base capitation payments to the family physicians in these organizations. Based on the shadow billing data submitted by the physicians, the total cost of these visits would have been approximately $517 million if they had been compensated under the fee-for-service model (The $517 million is an estimate because the calculation assumed that all family physicians who signed up to patient-enrolment models submitted all of their shadow billings to the Ministry. Shadow billing is an incentive the Ministry provides to patient-enrolment physicians who submit a record of the services in their predetermined basket of medical services that they have performed. It is likely that physicians neglected to submit some of these records). The difference of $522 million is the largest component of the additional cost paid to Family Health Organizations.

The $522 million is significant, as it indicates that the physicians were not providing core primary care services as often as they should be (or expected to be) and/or that base capitation payments are excessive. We also noted that the $522 million included base capitation payments for 1.78 million patients who were enrolled but did not visit their physicians in that year (discussed in **Section 4.4.4**). However, the Ministry's view was that if family physicians in the patient-enrolment model returned to billing based on fee-for-service, the volume of their billings might increase to compensate and equalize their income, and the estimated difference of $500 million might reduce.

The remaining $600 million of the $1.1 billion paid to Family Health Organizations (on top of the $500 million additional cost) consists of other payments such as the comprehensive base capitation payments (discussed in **Section 4.4.3**) and access bonus (discussed in **Section 4.4.2**).

RECOMMENDATION 1

To help ensure that patient-enrolment models are cost-effective, the Ministry of Health and Long-Term Care should review the base capitation payments and make any necessary adjustment in order to ensure that the fees paid are justified for the basket of services physicians actually provide to their enrolled patients.

MINISTRY RESPONSE

The Ministry supports the recommendation and agrees to conduct a review of the capitation rate, including evaluation of the core services provided to patients by physicians who receive a base rate capitation payment. Adjustments to the capitation rate will require the Ministry to engage with the Ontario Medical Association (OMA) through the negotiations and consultation processes of the Ontario Medical Association Representation Rights and Joint Negotiation and Dispute Resolution Agreement (OMA Representation Rights Agreement).

4.2.2 The Ministry Cannot Fully Justify Its Adoption of Patient-Enrolment Models as Compared to the Fee-for-Service Model

The Ministry Has Not Defined "Quality of Care"

One of the Ministry's goals is to increase "quality of care" for patients of family physicians—but it has not clearly defined that term for patient-enrolment models, and it has set no targets to measure quality. The Ministry acknowledged that evaluations of quality of care in primary care are lacking but has made only limited progress in addressing this concern.

In 2014, Health Quality Ontario released a report introducing a Primary Care Performance Measurement Framework for Ontario. The report noted that Ontario does not have a co-ordinated and comprehensive approach to collect, analyze and report on the performance of the primary care system, and that almost no information on performance has been available to individual primary care practices other than data they collect and analyze themselves. However, many, if not most, practices lack the capacity to generate their own performance data. In the absence of such information, including time trends and peer comparisons, primary care providers find it hard to identify areas of possible improvement.

Close to 85% of the physicians who responded to our survey on billing, compensation and the overall health system agreed that at least 20% of physicians' income should be based on quality of services. Consensus appears to be lacking on the meaning of this requirement, however. Some physicians indicated that, for example, the time they spend on educating patients about their health conditions, following up on patients and counselling them reflects the quality of services they provide. In contrast, a large number of physicians thought that thorough study and research are required to establish appropriate quality indicators. Some suggested that quality indicators should be specific not only to the specialty but also to the patients' characteristics, and should be predictable, controllable, enforceable and dependent on the availability of accurate data.

The Ministry's Cost-Effectiveness Evaluation of Patient-Enrolment Models Was Inconclusive

In May 2014, the Ministry completed an evaluation of the costs and benefits of Family Health Organizations and Family Health Groups, and assessed whether the incremental costs of these models are justified when compared to the traditional fee-for-service model. The evaluation concluded that while the additional costs associated with Family Health Groups and Family Health Organizations have resulted in improvements related to achieving the goals of primary health care reform, it is difficult to determine the degree to which the additional costs are justified when measured against the benefits. Therefore, the evaluation was unable to provide a direct answer to the question of whether or not the incremental cost increase is fully justified.

In 2015, the Ministry developed a performance report that consolidated a number of statistics and performance metrics for each patient-enrolment model. The report was developed only for the 2014/15 fiscal year and did not include any benchmarks or standards against which reported metrics could be measured. For example, the report noted that the percentage of eligible individuals who received an influenza vaccination ranged from as low as 0% in certain family practices to as high as 73% in others. However, there was no indication as to what an appropriate percentage would be. Benchmarking against performance standards (or against the achievements of high-performing systems) helps establish performance targets and quantify the potential for improvement. The Ministry indicated that the performance report is the closest it has come to a comprehensive assessment of the different models' performance.

We noted that the only area in primary care where the Ministry has established a formal mechanism for monitoring performance and assessing quality is for its inter-professional primary care organizations, such as Family Health Teams. Since the 2013/14 fiscal year, Health Quality Ontario has required these organizations to submit a Quality

Improvement Plan annually. This plan details an organization's progress on a set of provincial priority indicators. For each indicator, organizations are required to set targets and report their performance against these targets. For example, for colorectal, breast and cervical cancer screening, organizations are required to report on the percentage of patients who are up to date on their screening. This is in contrast to the Ministry's internal performance report mentioned earlier, which only reported on the percentage of patients who had a screening.

We noted from the results of the 2015/16 Quality Improvement Plan that the majority of Family Health Teams did not meet their indicator targets. For each of the 11 indicators reported on, targets were met or exceeded only between 18% and 52% of the time. However, because only about 3,000 physicians joined inter-professional teams, and only approximately 25% of Ontarians receive primary care through these inter-professional teams, these Quality Improvement Plans do not capture performance levels for all physicians in Ontario.

RECOMMENDATION 2

To help ensure that patients receive better-quality care that is cost effective and that patient-enrolment models for family physicians meet the goals and objectives of the Ministry of Health and Long-Term Care (Ministry), the Ministry should:

- clearly define indicators to measure "quality of care" for enrolled patients;
- establish targets that the patient-enrolment models should achieve within a given period of time; and
- collect and publish relevant and reliable data to monitor and assess performance against targets on a regular basis.

MINISTRY RESPONSE

The Ministry supports this recommendation, and, in collaboration with Health Quality Ontario, has made significant progress in defining "quality of care" in recent years, most significantly through the development of Health Quality Ontario's Primary Care Performance Measurement Framework. The Ministry will work to build on this progress by finalizing priority indicators and establishing targets in support of greater transparency, measurement and oversight. This work is already underway, as improved measurement and monitoring of performance results are a key component of the Ministry's Patients First strategy.

The recommendation to publish relevant data is also highly consistent with the 2016 Mandate Letter from the Premier to the Minister of Health directing the Ministry to "[implement] a publicly available performance report to track and report on primary care access." The Ministry will work to implement public reporting measures, consistent with the mandate and this recommendation, to support the monitoring and assessment of primary-care performance across the province.

4.2.3 The Higher Number of Family Physicians Has Not Shortened Wait Times

Between 2006/07 and 2015/16, the number of family physicians in Ontario, rose by 31%, from about 10,740 to about 14,100. Over the same period, the number of Ontarians who have a family physician rose by 43%, from roughly 7.4 million to 10.6 million. This increase was one of the purposes behind Ontario's move to patient-enrolment models (see **Section 2.2.2**). However, it has not translated into increased access to care as measured by wait times, 57% of Ontarians had to wait two days or more to see their family physician. This proportion is worse than the 51% reported in 2006/07, the first year when the Ministry began to collect the data. See **Figure 11** for the trend.

We noted that the Ministry does not have an administrative data system that allows it to collect complete, accurate and timely data relating to patients' same-day or next-day access. Therefore,

Figure 11: Percentage of Ontarians Who Waited Two Days or More to See Their Family Physician, Number of Family Physicians, and Patients Enrolled with a Family Physician, 2006/07–2015/16

Source of data: Ministry of Health and Long-Term Care and Institute for Clinical Evaluative Sciences

	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16
% of Ontarians who waited two days or more to see their family physician[1]	51	54	53	52	Not collected[2]	Not collected[2]	57[3]	55	56	57
# of family physicians[4]	10,740	10,870	11,000	11,400	11,520	11,850	12,250	12,660	13,120	14,100
# of patients who are enrolled with a family physician (million)	7.4	8.2	8.8	9.2	9.5	9.8	10.0	10.2	10.4	10.6

1. The data was self-reported and is based on the results of Ministry's survey of Ontarians.
2. The Ministry did not collect survey data in fiscal years 2010/11 and 2011/12.
3. The Ministry's survey data covered only the six-month period from October 2012 to March 2013.
4. This is a headcount of general practitioners; data between 2006/07 and 2014/15 was obtained from the Institute for Clinical Evaluative Sciences, and 2015/16 data was obtained from the Ministry. The numbers are rounded to the nearest tenth.

the Ministry has since 2006/07 collected survey data on a quarterly basis to obtain an understanding of patient access.

Timely Access to Care and Access to After-Hours Care Lacking in Ontario

In 2014, the Commonwealth Fund conducted an International Health Policy Survey of Older Adults. (The Commonwealth Fund is a private U.S. foundation that conducts surveys on patients and providers in 11 developed countries.) This survey revealed that only about 44% of Ontarians aged 55 or older saw a physician in two days or less. This was on par with the rate in British Columbia and among the best in Canada, but significantly worse than the average of the 11 developed countries, 62%. This 2014 survey also found that 47% of the same group of patients in Ontario said it was very difficult or somewhat difficult to get medical care after hours. Again, this was on par with British Columbia and among the best in Canada, but significantly worse than the average, 29%, of the 11 developed countries.

4.2.4 Definition of "Regular Hours" Lacking and No Oversight to Ensure Family Physicians Meet After-Hours Requirements

The base capitation payments have been set on the assumption that patient enrolment physicians will keep regular office hours of sufficient length for their patients to see them for non-urgent care and not have to visit emergency departments. The Family Health Organization contract states that "except for Recognized Holidays, the physicians shall ensure that a sufficient number of physicians are available to provide the services during reasonable and regular office hours from Monday through Friday sufficient and convenient to serve Enrolled Patients." The terms "reasonable and regular" and "sufficient and convenient" are not defined in the contract, however.

Our review of Ministry data noted that for the 2014/15 fiscal year, each physician in a Family

Health Organization group worked an average of 3.4 days per week, and each Family Health Group physician worked an average of four days per week.

Patient-enrolment model contracts also do not stipulate the minimum number of services a physician or a group of physicians must perform over a given period of time. There is no mention of vacation times in the Family Health Organization and Family Health Group contracts. Physicians in a group will decide among themselves when to take vacation.

Many patient-enrolment family physicians do not work the number of weeknight or weekend hours required. However, the Ministry takes no action in such cases. While physicians in Family Health Organizations and Family Health Groups are required to provide a specified amount of after-hours services for their patients (defined as after 5:00 p.m. on weekdays and all day on weekends), we noted the following for the 2014/15 fiscal year:

- 60% of Family Health Organizations did not meet their after-hours requirements; and
- 36% of Family Health Groups did not meet their after-hours requirements.

Physicians are required to provide a minimum of a three-hour block of after-hours time for a specified number of days a week, depending on the number of physicians working in the group (for example, for a Family Health Organization with three physicians, the contract requires them to provide services for a minimum of a three-hour block on at least three days a week). Patient-enrolment contracts have no financial penalties for not meeting after-hours requirements, even though the result could be patients visiting emergency departments or walk-in clinics, leading to duplication on taxpayer money for services already paid for and covered under the base capitation payments. Ministry survey data for the period October 2014 to September 2015 showed that approximately 52% of Ontarians found it difficult to obtain medical care in the evening, on a weekend or on a public holiday without having to go to the emergency department. The same survey data showed that approximately 45% of Ontarians said that their family physician did not offer an after-hours clinic.

RECOMMENDATION 3

To ensure patients are able to access their family physicians in a timely manner when needed, and also to reduce the strain on emergency departments in hospitals, the Ministry of Health and Long-term Care should:

- clearly define the minimum number of regular hours (including evening and weekend requirements) in every patient-enrolment contract;
- regularly monitor and determine whether physicians participating in patient-enrolment models are meeting all their regular and after-hours requirements; and
- implement consequences of not meeting contract requirements, such as the imposition of an administrative penalty/fine.

MINISTRY RESPONSE

The Ministry supports this recommendation and will conduct a policy and contract review to evaluate whether the current enrolment-related provisions in the patient enrolment contracts contribute to improved access to primary care services for enrolled patients.

The Ministry will monitor to determine whether physicians participating in enrolment models are meeting all the regular and after-hours requirements, and will implement a program to make this determination.

Enabling these recommendations would require contract amendments. Contract amendments, including minimum number of regular hours and consequences for not meeting contract requirements, will require the Ministry to engage with the OMA through the negotiations and consultation processes of the OMA Representation Rights Agreement.

4.2.5 The Ministry Does Not Know Why Patients of Patient-Enrolment Physicians Sought Care Elsewhere

It was the Ministry's intention that by having patients sign an enrolment form when they enrolled with a family physician, they would seek all their primary care from that physician. However, the Ministry's billing system indicated that 40% of enrolled patients went to walk-in clinics or other family physicians outside the group with which they were enrolled in 2015. The same percentage was reported in 2013. The Ministry does not have complete information, such as which physicians are operating walk-in practices, which would allow it to study this trend further.

Use of Walk-In Clinics for Care That Could Be Provided by Family Physicians

Walk-in clinics provide quick access for patients who require immediate care. Best practices require that patients who have chronic health conditions should visit the same primary care physician for continuity of care. However, an estimated 27% of enrolled patients have chronic health conditions and regularly seek primary care outside the physician group with which they are enrolled. (The 27% estimate is based on the number of patients who seek care several times each year, and is a significant portion of the 40% of all enrolled patients who seek outside care.) The Ministry does not know why this group continues seeking outside care, mainly because it has no way to identify which physicians operate a walk-in clinic or family physician practice, or both, which would let it do further analysis.

We noted that the following reasons could contribute to outside use:

- convenience for patients—for example, many walk-in clinics operate in the Greater Toronto Area, and these clinics may be convenient for people who work in the area but whose family physician could be miles away; and
- unavailability of family physician—for example, because there were too many patients waiting during opening hours, leading to long wait times; the practice was not open during certain regular hours, after hours or on statutory holidays; or the physician was on holiday.

Lack of Integration Between Walk-In Clinics and Family Physician Practices

The Ministry's survey data for the period October 2014 to September 2015 showed that approximately 30% of Ontarians had visited a walk-in clinic in the last 12 months. However, the Ministry has not required physicians to share patients' records between walk-in clinics and family physician practices. As a result, the continuity of care is hampered by the lack of integration between walk-in clinics and family physician practices and there may be duplication of services such as diagnostic testing. Although the Ministry notified family physicians on a monthly basis of which of their enrolment patients had sought outside care, the Ministry does not know how often the family physicians would follow up with their enrolled patients to understand why they seek outside care, and whether the family physicians have all the information they need to continue to provide comprehensive care to their enrolled patients.

RECOMMENDATION 4

To ensure that patients are able to receive continuity of primary care as stated in one of the Ministry of Health and Long-Term Care's (Ministry's) objectives, the Ministry should explore different options, such as requiring that patient records be shared between physicians, in order to better co-ordinate care for patients who continuously seek care from more than one primary care physician over time and implement change with the ultimate objective of putting the patient first.

MINISTRY RESPONSE

The Ministry welcomes this recommendation as it supports continuity of care for all patients. The Ministry will review options for sharing of patient health data in an effort to improve coordination of care for patients receiving care by more than one physician. This review would occur within the context of the Ministry's recently launched Patients First strategy. A key priority of Patients First is to implement local reforms to support greater information-sharing within local communities, and one aspect of this would be information-sharing amongst primary care practices, including from walk-in clinics to a patient's regular physician.

High Use of Emergency Department Services for Non-Urgent Care That Could be Provided by Family Physicians

During 2014/15, about 243,000 visits were made to emergency departments for conditions that could have been treated in a primary care setting. The Ministry estimated these visits cost $62 million, of which $33 million was incurred by patients enrolled in Family Health Organizations. This $33 million is duplication of taxpayer money for services already paid for and covered under the contracts with Family Health Organization physicians. The Ministry does not recover these duplicate costs from the compensation paid to these patients' family physicians, however, because it does not want to deter patients from going to emergency departments in case their health conditions actually require emergency care.

However, we noted that the Ministry's survey for the period September 2014 to October 2015 reported that 42% of Ontarians (the same percentage as in 2013) indicated that the last time they went to an emergency department was for a condition that could be treated by their primary care physician if he or she had been available. The same survey also found that 26% said they had gone to an emergency department because their primary care physician was not available. We also noted that, of the approximately 243,000 emergency department visits made during 2014/15 that could have been treated by family physicians, about 60% were made after hours (after 5:00 p.m. and on weekends), and about 40% were made during regular hours (weekdays between 8:00 a.m. and 5:00 p.m.).

Access to after-hours care is also a problem elsewhere in Canada, and is significantly below the international average of 10 developed and industrialized countries, based on the Commonwealth Fund International Health Policy Survey of 2015. In Canada, 48% of physicians reported that they have an arrangement in their practice where patients can see a physician or nurse when the practice is closed or after hours without going to the hospital emergency department. Canada's average was far below the 75% of physicians who reported the same in the 10 developed countries. We noted that the better-performing jurisdictions have various after-hours arrangements in place:

- In England, general practitioners can choose whether to provide 24-hour care for their patients or to transfer responsibility for out-of-hours services to the National Health Service or delegate out-of-hours services to a general practitioner co-operative.
- In New Zealand, after-hours services are organized at the regional level and have different hours of operation depending on the specific network's contractual requirements.

In Denmark, a country that was not included in the survey, after-hours service can be first accessed remotely for a prescription or referral to a hospital or treatment centre to see a provider. In 1994, Denmark restructured the delivery and organizing structure of the after-hours service and transitioned responsibility to counties. At the time of our audit, the Ministry has considered these best practices adopted from other jurisdictions.

We discuss some of the financial consequences of outside use by enrolled patients in **Section 4.4.2**.

RECOMMENDATION 5

To minimize the number of patient visits to emergency departments for non-urgent care that could be provided in a primary care setting, the Ministry of Health and Long-term Care should:

- evaluate whether the existing after-hours services offered by the contracted physicians are sufficient for their enrolled patients to obtain non-urgent care;
- better educate patients on the most appropriate place for non-urgent care when their family physicians are not available; and
- consider best practices from other jurisdictions, such as for ensuring that after-hours care is easily accessible by patients within their local communities.

MINISTRY RESPONSE

The Ministry welcomes this recommendation and supports that emergency department visits for non-urgent care should be provided in a primary health-care setting. However, in many rural areas of the province, primary health-care physicians are often responsible for much of the work being done in emergency departments and in other parts of hospitals. The Ministry agrees to:

- evaluate whether existing after-hours services offered by the enrolling physician are sufficient for enrolled patients to obtain non-urgent care;
- review existing communication strategy and investigate additional means of educating patients on the most appropriate place for non-urgent care; and
- conduct a review of best practices from other jurisdictions around access to care after regular business hours.

Enabling these recommendations would require contract amendments and will require the Ministry to engage with the OMA through the negotiations and consultation processes of the OMA Representation Rights Agreement.

4.3 Physician Payments Vary Widely

4.3.1 High Disparity of Gross Payment per Physician within Specialties

We noted that, even within the same specialty, there were large variances between the median gross billing paid and the gross billing paid at the 90th percentile. (The median is a useful average for this comparison—half are paid more than the median and half are paid less— and the 90th percentile is a good measure of the high extreme.) **Figure 12** lists the five specialties with the largest differences between their median and 90th percentile gross payments. The differences range from approximately $460,400 to $713,000.

When looking at physician compensation, it is important to note that these payments do not reflect physicians' net incomes, but rather their gross billings. This observation is supported by many of the physicians who responded to our survey, who indicated that comparing gross payments alone is misleading because, for example, overhead costs vary between regions. However, the Ministry does not know how much each physician has to pay for out-of-pocket costs such as rent, office expenses, administrative staff, supplies and equipment, so it does not have reliable information on physicians' net incomes. According to a 2012 article in the journal *Healthcare Policy*, physicians self-reported their average overhead as being about 28% of their gross clinical payment; it also suggested that overhead could be as high as 42.5% for physicians practising in ophthalmology.

In addition to lacking complete information on physicians' profit margin, the Ministry also lacks data on whether physicians work part-time or full-time, the size and scale of their practices, and individual physicians' hospital versus community practice. As a result, the Ministry cannot assess whether the differences in payment within specialties are reasonable.

Figure 12: Specialties with the Largest Differences between Their Median and 90th Percentile Gross Payments, 2014/15

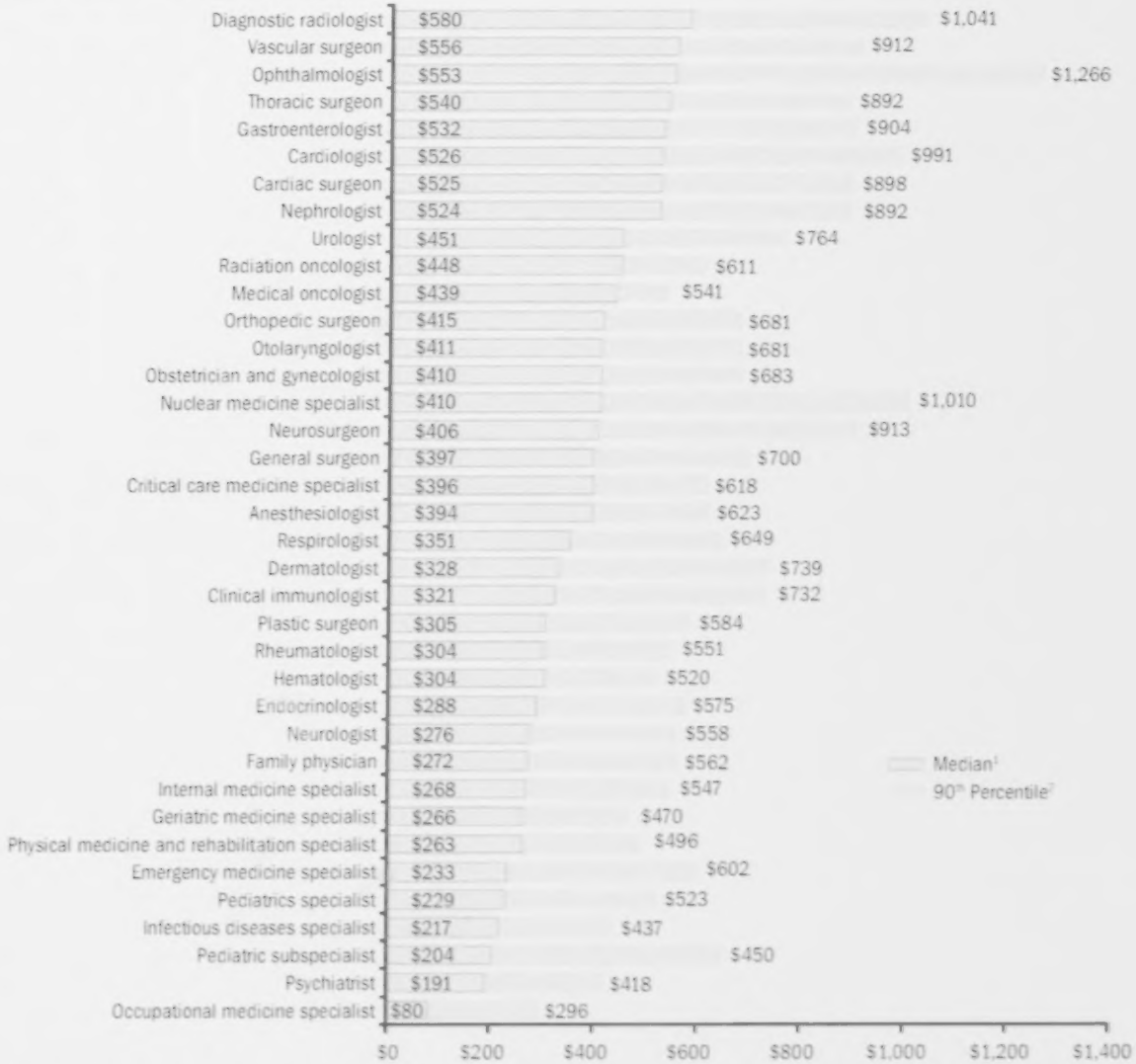
Source of data: Institute for Clinical Evaluative Sciences

Specialty	Median ($)	90th Percentile ($)*	Difference ($)	Difference (%)
Ophthalmologist	552,600	1,265,600	713,000	129
Nuclear medicine specialist	409,600	1,009,500	599,900	146
Neurosurgeon	405,700	912,700	507,000	125
Cardiologist	526,400	991,200	464,800	88
Radiologist	580,200	1,040,600	460,500	79

* The 90th percentile represents the higher end of the range for each speciality.

Figure 13: Median and 90th Percentile Payments to Physicians from OHIP by Specialty, 2014/15 ($ 000)

Source of data: Institute for Clinical Evaluative Sciences



1. Median payments are calculated using total headcount of Ontario physicians. These amounts are approximately $40,000 more per specialty if both averages and full-time equivalent are used instead of the median and headcount.
2. The 90th percentile represents the higher end of the range for each specialty.

4.3.2 High Disparity of Gross Payment per Physician between Specialties

Average payments to physicians also differ significantly depending on medical specialty. **Figure 13** breaks down payments to physicians by specialty. We compared the median gross payment between specialties, and noted that the fee-for-service model in Ontario favours procedural specialists (those who perform procedures such as diagnostic testing or surgery) who generate a high volume of services. For example, in 2014/15:

- Diagnostic radiologists, the highest earning group in median gross billings, performed on average 21,750 services, but on average were paid $29 per service.
- Vascular surgeons, the second-highest earning group in median gross billings, performed on average 12,230 services and were paid $43 per service.
- Ophthalmologists, the third-highest earning group in median gross billings, performed on average 12,040 services, but on average were paid $53 per service.

In contrast to the above examples, in 2014/15:

- Physicians practising internal medicine performed on average only 7,580 services and were paid $40 per service.
- Pediatricians performed on average 6,810 services and were paid $31 per service.
- Geriatricians performed on average 2,400 services but were paid $74 per service.

This large difference in gross billings between physicians is primarily due to the differences in the nature of their work and how they are paid. Specifically, medical non-procedural specialists devote most of their time to patient visits and consultations. In contrast, procedural specialists tend to do procedures such as surgeries and diagnostic testing, which in a fee-for-service system allows them to bill for multiple services. It is the combination of a high volume of services and a relatively higher average fee paid per service that is responsible for the disparity between the specialties with the highest gross billing and the other specialties. The exception is the diagnostic radiologists, whose average fees are relatively low but who are able to provide a very high volume of services.

Not all physicians think that these differences in fee-for-service billing rates are justified. Some physicians who responded to our survey commented that non-procedural specialists, such as pediatricians and psychiatrists, have been underpaid compared to procedural specialists such as ophthalmologists, because the former spend significantly more time with patients and their family members.

RECOMMENDATION 6

To get a better understanding of the significant variations in physician compensation within and between specialties, the Ministry of Health and Long-Term Care should obtain accurate information on physicians' practices, including their operating cost and profit margin in providing OHIP services.

MINISTRY RESPONSE

The Ministry welcomes this recommendation and will evaluate the feasibility of obtaining this information.

4.4 The Implementation of Patient-Enrolment Models Has Been Flawed

4.4.1 Physicians' Opting for Patient-Enrolment Models Not Necessarily Patient-Centred

The percentage of Ontario family physicians who opted to join patient-enrolment models has increased significantly—from 2% (202) in 2002 to about 75% (8,803) in 2015. Since the reform of the primary care system, physicians were given a choice of whether or not to enter into a model and also the type of model to enter into. However, although the opting-in process allowed physicians flexibility in

determining how they deliver care to their patients, the choice was physician-driven, not patient-driven or based on local needs.

The Ministry offered physicians a revenue analysis showing what their change in revenue would be if they switched from their current model to a new model:

- When Family Health Groups were introduced in 2003, the Ministry offered all physicians who were working in a strictly fee-for-service model a revenue analysis that showed what the estimated change in their annual revenue would be if they switched to a Family Health Group model.
- Similarly, when Family Health Organizations were introduced in 2006, the Ministry offered a similar revenue analysis to all physicians.

We noted that there was a significant switch from the Family Health Groups to Family Health Organizations primarily due to higher projected compensation at the time: the number of Family Health Organization physicians increased from 308 in 2006/07 to 5,057 in 2015/16, while the number of Family Health Group physicians fell from a high of 4,337 in 2007/08 to 2,618 in 2015/16.

Also, we noted the following:

- A 2015 research paper (published in Health Economics journal) found that physicians selected which payment model to enter into based on their existing practice characteristics. For example, physicians with more complex-needs patients were less likely to switch to enrolment-based models such as Family Health Organizations, where higher levels of effort were not financially rewarded.
- A 2012 report by the Institute for Clinical Evaluative Sciences found that patients in enrolment-based models with high capitation payments such as Family Health Organizations were from higher-income neighbourhoods and had a lower illness profile than patients in low-capitation-payment models such as Family Health Groups.

4.4.2 Implementation of the Access Bonus Resulted in Duplicate Payments

The Ministry spent between $67 and $100 million per year between 2010/11 and 2014/15 on a physician incentive called the "access bonus," which is supposed to help ensure continuity of primary care. The bonus is meant to encourage family physicians in certain patient-enrolment models, including Family Health Organizations, to be available to their enrolled patients so those patients do not seek primary care services from outside sources.

The implementation of the access bonus is complex, and works as follows:

- Family physicians participating in patient-enrolment models receive a bonus that can amount to approximately 20% of the base capitation payment.
- A portion of a physician's access bonus is held back each time his or her patients seek primary care services from outside sources such as walk-in clinics, but not when patients seek primary care from emergency departments. The amount held back from the bonus is equal to the fee-for-service payments made by the Ministry to the outside physician who treated the patient.
- The amount held back can be equal to the entire bonus.
- If patients do not seek primary care services from outside sources, then no part of the base capitation payment is held back.

Patients in Ontario are not restricted from seeking health-care services from walk-in clinics or other settings, regardless of whether they are enrolled with a family physician or not. In 2014/15, almost all physicians had some enrolled patients who visited family physicians outside their care, and as a result the maximum amount of access bonus available, $207.3 million, was reduced by $109 million. The remaining $98.3 million was paid out to physicians as the incentive.

In some cases, when patients visit physicians other than the one they are enrolled with, the

Ministry pays twice for services already covered under enrolment-based payments—once through the capitation payments to the family physician practising under a patient-enrolment model, and again through the fee-for-service payment to the other physician (for example, a physician practising at a walk-in clinic). The reason for this duplication is that the deduction penalty is capped at a maximum, and after that maximum has been reached, the Ministry essentially pays a second time for the same service. We noted that for the 2014/15 fiscal year alone, the Ministry paid an additional $15.7 million to cover services provided to patients who should have seen their own family physicians but went elsewhere. The result was duplicate payments of $76.3 million cumulatively over the five years leading up to fiscal 2014/15 (see **Figure 14**). The Ministry does not recover these duplicate payments. We identified the same issue with duplicate payments in our *2011 Annual Report* section, **Funding Alternatives for Family Physicians**.

In 2013, the Ministry established a working group to conduct a policy review of the access bonus incentive. The group cited geography and convenience as key determinants in whether enrolled patients seek outside care. It noted that during 2014/15, the patient-enrolment models with the highest rates of outside care were primarily concentrated in the Greater Toronto Area. Patients in this area have more primary care options, such as walk-in clinics, than patients in rural areas. However, the working group could not adequately measure the impact of walk-in clinics on physicians' access bonus, since there is no way to distinguish a walk-in clinic in Ministry data (walk-in clinics are not required to submit claims using a specific group identifier).

We noted that the structure of the bonus payments system may favour physicians practising in smaller urban and rural areas. Visits to emergency departments for conditions that could be treated in a primary care setting do not affect a physician's access bonus. We found that rural and smaller urban areas had a significantly higher number of emergency department visits than large urban areas. For example, in 2014/15, a large urban region with a population of approximately 1.4 million had approximately 6,000 emergency department visits, while a smaller urban/more rural region with a population of approximately 560,000 had approximately 20,000 of these visits. This could in part be due to the availability of fewer primary care options, such as walk-in clinics, in these regions. The fact that these emergency department visits do not affect a physician's access bonus could contribute to the higher access bonuses that physicians in smaller urban and rural areas earn than physicians in large urban areas.

The Ministry's access bonus working group made a number of recommendations in May 2014; however, after the breakdown in the Ministry's negotiations with the Ontario Medical Association, none of the report's recommendations have been implemented. Some key recommendations from the working group are:

- targeted physician education through an advisory team of physicians and administrators that the province could set up to help the groups with significant access bonus problems

Figure 14: Duplicated Payments for Services Covered under Base Capitation Fees, 2010/11–2014/15

Source of data: Ministry of Health and Long-Term Care

Fiscal Year	Duplicate Payment ($ million)
2010/11	13.8
2011/12	18.6
2012/13	15.4
2013/14	12.8
2014/15	15.7
Total	**76.3**

Note: Physicians who are under high base capitation fee models, such as Family Health Organizations, can earn a bonus amounting to 20% of their base capitation fee. The Ministry deducts a portion of the bonus from the family physicians each time their enrolled patients seek outside care (such as walk-ins), but it caps the deductions so that the remaining 80% of the base capitation fee is not affected. Because of this cap on deductions, in some cases the Ministry pays twice for the services already covered under the base capitation fee—once through base capitation payments to family physicians practising under patient-enrolment models, and again through fee-for-service payments to other physicians who actually treated the patients (e.g., physicians practising at walk-in clinics).

identify the issues and recommend solutions based on the individual circumstances;
- improved reporting to physicians to help them better understand outside use by their patients (for example, the list of top outside users) and better identify the options available to address this issue;
- review of the services listed under the base capitation basket in certain patient-enrolment contracts;
- improved patient education by making patients fully aware of the commitment they make to see their family physicians for the basket of services when they sign the Enrolment Form; and
- collection by the Ministry of comprehensive, province-wide data on daytime access to services, from both the physician group and patient perspectives.

RECOMMENDATION 7

To ensure that the access bonus paid to encourage family physicians in patient-enrolment models has its intended effect, and that the bonus does not result in duplicate payments for some medical services, the Ministry of Health and Long-Term Care should:
- implement the recommendations from its policy review on the access bonus to educate targeted physicians, improve reporting to physicians to help them better understand their patients' use of outside services, and improve patient education by making patients fully aware of the commitment they agree to when they enroll with their family physicians; and
- redesign the bonus so that the Ministry does not pay for duplicated services.

MINISTRY RESPONSE

The Ministry supports this recommendation and will undertake a review of the information received by the patient at the time of enrolment and the reporting received by the physician regarding enrolled patients who have been provided services outside the enrolling group. The focus of the review will be:
- education on the meaning of "enrolment" and what the patient is agreeing to when signing a roster form; and
- additional reporting to physicians on patients who are receiving services outside the group.

In addition, the Ministry will conduct a review regarding the redesign of the access bonus to include an examination of the number of groups that have patients receiving services outside the enrolling group in excess of the access bonus and expenditures by the Ministry. The review will include a determination whether any changes to the "hold back" are necessary.

Enabling these recommendations would require contract amendments. Any change to the access bonus will require the Ministry to engage with the OMA through the negotiations and consultation processes of the OMA Representation Rights Agreement.

4.4.3 Some Payments to Family Physicians under Patient-Enrolment Models Could Have Been Saved

As Physician Services Agreements have been renegotiated over the last 15 years, various special payments and programs have been added to patient-enrolment models. These payments have complicated overall fee structures, and it is no longer obvious what some of them are for, what needs to be done to qualify for them, or whether they are still necessary. We noted the following examples:
- In 2014/15, $364 million was paid to all family physicians who opted for patient-enrolment models, under an agreement by which each family physician practising in a patient-enrolment model receives approximately $3 per month, on top of the base capitation

payments, for each enrolled patient. This payment was negotiated in the 2004 Physician Services Agreement. However, it is not clear how this payment impacts quality of care. The Ministry proposed reducing the dollar amount of the payment in its negotiations with the OMA on the 2014 Physician Services Agreement, but at the time of our audit the parties had not reached an agreement and no progress had been made. For the five years up to and including 2014/15, the payment amounted to approximately $1.7 billion.

- In 2002, the Ministry introduced a number of premiums that are one-time payments to offset costs associated with the building of a patient roster and to encourage physicians to enroll complex-needs patients who are without family physicians. The Ministry discontinued some of these premiums in June 2015 after a review found they were no longer required to incentivize physicians and that cutting them would save an estimated $34.2 million in 2015/16 and $41 million in 2016/17. Had the Ministry completed its review earlier, it could have found more savings by negotiating this change in the 2008 or 2012 Physician Services Agreement.
- The Ministry created the Diabetes Management Incentive Code in 2002 to encourage primary care physicians to provide optimal, comprehensive care for diabetic patients. The Ministry did not review the cost-effectiveness of this incentive until 2012, when an Institute for Clinical Evaluative Sciences study concluded that the code led to only minimal improvements in the quality of diabetes care and that the physicians claiming it had likely already been providing the highest quality of care to their diabetic patients before the incentive was introduced. The Ministry finally amended payment criteria for the code in September 2015, estimating that the changes would result in $8 million in annual savings.

4.4.4 Base Capitation Payments May Not Be Serving Their Intended Purpose

Overpayments Made in Modification of Base Capitation Payments

Base capitation payments are meant to account for the cost of the primary care required by patients based simply on their age and sex. However, the Ministry realizes that age- and gender-based capitation payments do not adequately capture the variation in need for primary care services among patient populations, and that the current system does not account for the time and resources needed to care for patients with complex medical conditions. The Ministry has attempted to address this problem, although its most recent effort was not well implemented.

In January 2014, the Ministry paid $40 million as an interim payment modifier to all patient-enrolment physicians who treated high-needs patients enrolled in their practices. Out of this $40 million, $17.4 million was paid to approximately 3,400 physicians who were in patient-enrolment models that are compensated on an enhanced fee-for-service basis—which indicates that these physicians were already being compensated for treating their high-needs patients. These 3,400 physicians therefore should not have received the payment. However, although the $17.4 million in payments was not justified, the Ministry agreed to let the payments stand after its negotiations with the Ontario Medical Association in 2012. The Ministry informed us that it was planning to limit this payment modifier to only the physicians it was intended for, but the implementation has been put on hold since March 31, 2014, after the breakdown in Physician Services Agreement negotiations between the Ministry and the Ontario Medical Association.

Some Enrolled Patients Did Not Visit Their Family Physicians At All

The Ministry pays base capitation payments to Family Health Organizations on the assumption that these family physicians are actually providing med-

ical services for the patients they enrol. However, in 2014/15, 1.78 million (or 33%) of the 5.4 million patients enrolled with a Family Health Organization did not visit their family physicians at all, yet we estimated that these physicians still received a total of $243 million just for having them enrolled. Males between the ages of 20 and 29 are the group most likely to not visit their family physician.

We reported the same concern in our *2011 Annual Report*. The Ministry responded at the time that because capitation payments are based on the average level of physician services used by persons of the same age and sex, it expected payments for patients who seldom or never visit their physician to be offset by the cost of treating those patients who require a high level of care. However, the Ministry could not provide any evidence for this offset and therefore could not substantiate whether its capitation payments are appropriate.

RECOMMENDATION 8

To better ensure that patient-enrolment models are cost-effective and that capitation payments, premiums and incentives achieve their intended purposes, the Ministry of Health and Long-Term Care should:

- pay capitation payments, premiums and incentives only where justified with evidence; and
- periodically review the number of patients who do not see the physician they are enrolled with, and assess whether continuing to pay physicians the full base capitation payments for these patients is reasonable.

MINISTRY RESPONSE

The Ministry welcomes this recommendation and agrees that payment of capitation, premiums and incentives should only take place when justified with evidence. The Ministry agrees to conduct a review of the capitation rate, including evaluation of the core services provided to patients by physicians who receive a base capitation payment. Any change to the capitation rate, premiums and incentives will require the Ministry to engage with the OMA through the negotiations and consultation processes of the OMA Representation Rights Agreement.

However, the capitation rate is determined by looking at all patients, those who do receive services and those who do not. The capitation rate is based on the assumption that some patients will see their physician many more times than an average patient and others would not see their physician at all in any given year. The Ministry will review other jurisdictions' capitation rate methodology.

4.5 Oversight of Fee-for-Service Payments to Physicians Is Weak

4.5.1 The Ministry Does Not Investigate Many Anomalous Physician Billings

Fee-for-service billing is still widely used by specialists and many family physicians for providing services that are not covered under the base capitation payments within the patient-enrolment models. (As we noted in **Section 2.3**, in 2015/16, of the $11.59 billion paid to all physicians in Ontario, about $6.33 billion, or 55%, was paid mainly to specialists on a fee-for-service basis.) The fee-for-service claims paid to physicians are based on an honour system, as physicians are responsible for ensuring that the claims they submit comply with the Schedule of Benefits. In addition, the Ministry has established a Payment Accountability Unit to review physician claims to ensure that they are appropriate. This unit educates physicians on the claims-submission process and pursues recovery of any overpayments resulting from claims-submission errors.

The Ministry analyzes paid claims through post-payment reviews to determine if the physicians submitted their claims properly and in accordance with the Schedule of Benefits. There are two types of post-payment review: reactive and proactive reviews.

The Ministry Adequately Addressed Public Complaints through Reactive Reviews

Under reactive reviews, the Ministry reviews individual physicians as a result of a complaint from the public or another physician, or as a result of a treatment being disputed on the basis of random verification letters the Ministry sends some patients. **Figure 15** shows the number of reactive reviews since 2011/12 and their results. Most recently, in 2015/16, the Ministry was recovering about $243,000 from 14 physicians.

The Ministry Identified Some Billing Anomalies through Proactive Reviews

Under proactive reviews, the Ministry identifies certain physicians as anomalous billers through statistical analysis of their billing and profile review. **Figure 16** shows the number of physicians flagged by the Ministry's proactive reviews between 2011 and 2015, and the results. Although the Ministry is able to identify anomalies and outliers, it explained that it did not investigate many cases because further investigation often requires significant time and effort. Since the beginning of 2013, it has not actively pursued recovery of overpayments; it was recovering approximately $19,700 in 2014 and nothing in both 2013 and 2015. For further details, refer to **Section 4.5.3, The Ministry Lacks Effective Enforcement Mechanisms to Recover Inappropriate Payments from Physicians.**

We also noted that, at the time of our audit, the Ministry had identified over 500 physicians who billed over $1 million each to OHIP in 2014/15, and had selected 12 of them for further analysis, based on available resources. The Ministry suspected that some of these billings might have been inappropriate: for instance, medically unnecessary services might have been performed or payment made for services that had not been rendered, or the standard of care might have been breached in other ways. For example:

- One ophthalmologist billed $6.6 million during 2014/15. The majority of this physician's billings came from performing laser procedures. The physician performed the procedures on average seven times per patient over the year. This physician also billed about $1.4 million to the province for diagnostic testing. Ordering unnecessary diagnostic tests by ophthalmologists is cited for caution by the Choosing Wisely national health campaign in the U.S. and Canada. Choosing Wisely encourages conversation between physicians and patients about unnecessary tests, treatments and procedures.
- One cardiologist billed $2.5 million during 2014/15. This physician performed over 68,000 services over the year, more than six times the number of services rendered by the average cardiologist. A large amount of this physician's billings came from giving

Figure 15: Number and Outcomes of the Ministry's Reactive Reviews, 2011/12–2015/16
Source of data: Ministry of Health and Long-Term Care

Fiscal Year	# of Physicians Reviewed Based on Complaints Received	Upon Further Review, No Issues Were Noted[1]	Physician Was Either Educated on Correct Billing or Referred to Other Entities[2]	# of Physicians from Whom Inappropriate Payments Were Recovered	Amount Being Recovered ($)
2011/12	746	543	178	25	422,500
2012/13	699	470	202	27	758,700
2013/14	302	178	117	7	218,800
2014/15	178	94	79	5	258,400
2015/16	82	19	49	14	243,000

1. Many complaints were found to be unsubstantiated.
2. Other entities include other areas within the Ministry and the College of Physicians and Surgeons of Ontario.

Figure 16: Results of Ministry's Proactive Reviews, 2011–2015

Source of data: Ministry of Health and Long-Term Care

Calendar Year	# of Physicians Flagged for Anomalous Billings	# of Physicians from Whom Overpayments Were Recovered	Amount Being Recovered ($)
2011	251	243	1,065,500
2012	356	184	1,837,000
2013	38	0	0
2014	221	1	19,700
2015	62	0	0

echocardiograms, Holter monitoring tests, stress tests and consultations. Echocardiograms and stress tests are widely accepted by the medical community to be at risk of being overutilized by cardiologists, as noted in the Choosing Wisely Canada campaign.

It is important to note that determining whether a service is medically necessary or not requires significant professional judgment.

The Ministry Does Not Investigate Many Other Anomalous Physician Billings

Our review of more recent data found at least 648 specialists whose billing trends were anomalous when compared to the expected range of days billed and services by specialty category for fiscal 2015/16. **Figure 17** identifies the number of specialists who were outside these ranges.

The standard or expected number of days billed annually and the expected number of annual services varies depending on the type of work the specialist is involved in. For example, a specialist who does diagnostic-type procedures, such as a diagnostic radiologist, typically bills between 183 and 235 days annually. The number of expected annual diagnostic services ranges between 5,366 and 10,266. The 648 specialists we identified, as indicated in **Figure 17**, billed a greater number of days than the upper limit of expected days. Of these 648 specialists, 406 also had more services than the upper limit of expected standard services.

We note that, in particular, nine specialists worked over 360 days, and six of them worked every single day of the year, 366 days (2016 was a leap year).

- One respirologist worked 361 days in 2015/16 and billed the province $1.3 million, which is 4.9 times the upper expected limit for physicians in the same billing category, non-procedural specialists. This specialist provided close to 12,400 services that year, 3.9 times the upper range of expected services for physicians in his billing category.
- One cardiologist worked 354 days in 2015/16 and billed the province $1.8 million, which is three times higher than the upper expected limit for physicians in the same billing category, procedural specialists. This specialist provided over 13,200 services that year, 2.4 times the upper range of expected services for physicians in the same billing category.
- One diagnostic radiologist worked 313 days in 2015/16 and billed the province $1.7 million, which is 2.8 times the upper expected limit for physicians in the same billing category, diagnostic specialists. This specialist had over 57,400 diagnostic services that year, 5.6 times the upper range of expected services for physicians in the same billing category.

At the time of our audit, the Ministry had not started looking into the anomalous billings we identified.

The Ministry's Schedule of Benefits Could Encourage Strategic Billing

In addition, we also noted that these high gross billings are achievable primarily because the Schedule of Benefits tends to pay a high dollar amount for the time it takes to perform the procedures. This is consistent with our finding in **Section 4.3.2** that the highest-billing physicians can either bill extremely high volumes (for example, diagnostic radiologists) with a lower fee per service or moderately high volumes (for example, vascular surgeons and ophthalmologists) with a relatively higher fee per service.

Figure 17: Number of Specialists Outside the Upper Limit of Expected Days Billed and Services, by Specialty Category, 2015/16

Source of data: Ministry of Health and Long-Term Care

	# of Days Billed		# of Services	
Specialty Category	Expected Annual Range[1]	# of Specialists Exceeding Upper End of Range	Expected Annual Range[1]	# of Specialists Exceeding Upper End of Range
Diagnostic[2]	183–235	58	5,366–10,226	45 of 58
Procedural[3]	199–239	44	3,135–5,497	30 of 44
Non-procedural[4]	148–190	221	1,720–3,176	154 of 221
Surgical[5]	185–225	196	2,603–4,253	98 of 196
Time based[6]	148–184	129	809–1,543	79 of 129
Total		**648**[7]		**406 of 648**

1. The expected range is calculated based on 0.25 of a standard deviation on either side of the calculated median, using actual physician billing for 2015/16.
2. Includes specialists such as pathologists and diagnostic radiologists.
3. Includes specialists such as nephrologists and cardiologists.
4. Includes specialists such as geriatricians and respirologists.
5. Includes specialists such as neurosurgeons, general surgeons and ophthalmologists.
6. Includes specialists such as psychiatrists and anesthesiologists.
7. The 648 specialists are part of the larger group of 1,129 specialists, who were first identified by filtering their billing data that shows they were outside of the expected annual range for any three of the following four indicators: number of days worked, number of patient visits, number of distinct patients treated and the amount billed.

The Schedule of Benefits could be providing some physicians with an incentive to schedule patient visits and perform medical services strategically in a way that maximizes their billing. (See also **Section 4.6**, where we discuss utilization of health-care services.)

RECOMMENDATION 9

To ensure that health-care dollars are spent only on procedures that are medically necessary, the Ministry of Health and Long-Term Care should work with the appropriate medical professionals to:

- establish evidence-based standards and guidelines for each specialty to ensure all procedures and/or tests performed are medically necessary for patients; and
- provide better education to patients on the common procedures that are not evidence-based.

MINISTRY RESPONSE

The Ministry supports this recommendation. The Ministry will look to convene medical experts to review medical diagnostics.

In addition, Health Quality Ontario (HQO) has recently launched a Quality Standards program. The goal of the Quality Standards program is to reduce existing variations in practice across the province and improve quality care delivery through the development of condition-specific standards that outline evidence-based best practices in relevant health-care settings. The quality standards serve as a resource for clinicians in determining the most appropriate care pathways throughout the care continuum, and include recommendations that are specific to diagnostic procedures and treatment modalities. Furthermore, the standards include a clear, concise guide to assist patients and caregivers in knowing what to expect in their care, to encourage dialogue between clinicians

and patients, and to ensure information is both consistent and accurate when it is shared both with patients and caregivers and within the inter-professional care team.

HQO also supports Choosing Wisely Canada (CWC), a program aimed at helping clinicians and patients engage in conversations about unnecessary tests, treatments and procedures. CWC has released over 180 lists of "things clinicians and patients should question" to support those conversations.

4.5.2 The Ministry Has Had No Inspector Function Since 2005

In 2005, the Ministry drastically changed the way it audits payments made to physicians. The change was in response to a report requested by the government in 2004 and prepared by a retired Justice of the Supreme Court of Canada, the Honourable Peter DeCarteret Cory (the Cory Report). Justice Cory reviewed the Ministry's process for auditing physicians' billings and made recommendations on how to change the system. At that time, the Ministry employed audit inspectors through the College of Physicians and Surgeons of Ontario, who could inspect physicians' medical records on-site, interview physicians and make observations within their practices. Physicians viewed this inspection process as unfair.

On April 21, 2005, Justice Cory concluded in his report that the Ministry's audit process had a debilitating and devastating effect on Ontario physicians and their families. The Cory Report included 118 recommendations on establishing a new medical audit process. The Ministry proposed in its Treasury Board submission that it would implement 60 of the 118 recommendations as stated, implement another 33 with modifications, and not implement the remaining 25. Of the 25 recommendations not implemented, 22 related to the inspector function—that is, giving inspectors power to inspect medical records on-site, interview physicians and make observations within a physician's practice. The Ministry's current audit process uses medical advisers rather than inspectors. Advisers can only review medical records off-site, after they receive copies of medical records from the physicians.

As we explain in **Section 4.5.3**, not having an inspector function has limited the Ministry's ability to recover inappropriate payments. We noted that both British Columbia and Alberta conduct on-site inspections as part of their physician billing audits when they deem them to be necessary.

In our survey of physicians, we received mixed results when we asked whether the Ministry has done enough to oversee and audit OHIP payments to physicians. While 33% of surveyed physicians agreed, 28% disagreed, with the remaining 39% saying they don't know or have no opinion. Some physicians mentioned that more needs to be done to deter physicians from continuing to bill inappropriately. Some others suggested that the Ministry should do more to communicate what billings it has audited and should report on the results. A few others suggested that the Ministry should educate physicians, both new and experienced, in how to bill properly.

4.5.3 The Ministry Lacks Effective Enforcement Mechanisms to Recover Inappropriate Payments from Physicians

The Ministry's current recovery process (detailed in **Figure 18**) on inappropriate physician billings is ineffective, lengthy and resource-intensive. Under this process, the onus is on the Ministry to prove that the physicians are in the wrong, not on the physicians to prove that they are right. The review and recovery process differs from the approach adopted by the Canada Revenue Agency, which requires taxpayers to prove that they are right.

Since the Ministry has changed how it audits payments made to physicians as a result of the Cory Report, it has focused more on educating physicians on how to bill appropriately, while it focuses too little on attempting to recover these overpayments. Unless a physician agrees to repay amounts volun-

Figure 18: Ministry of Health and Long-Term Care's Fee-for-Service Billing Review Process

Prepared by the Office of the Auditor General of Ontario

Background

To ensure prompt payment, the fee-for-service claims that physicians submit to the Ministry are paid on an honour system after being processed by computer. The Ministry emphasizes that these initial computerized checks and the resulting payment of claims do not necessarily mean that all payment requirements have been met, as the Schedule of Benefits is complex and some billings require evaluation. A small percentage of claims (about 1%) made up of complex surgeries are manually reviewed before they are paid. Since it is not cost-effective to review each of the approximate 184 million claims submitted annually before paying them, the Ministry conducts post-payment reviews of selected physician claims.

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Stage 1

Billing concerns are identified through reactive and proactive reviews. Reactive reviews are reviews of an individual or group of physician's billing practices when issues or complaints arise specific to that physician or group of physicians. Proactive reviews identify anomalous billings through statistical analysis of physicians' billing and their profile review.

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Stage 2

The Ministry sends a letter to the physicians educating them on appropriate billing. In this letter, the Ministry explains the matter in question and encourages the physicians to provide a written explanation.

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The physician provides an explanation that is satisfactory to the Ministry or makes a voluntary repayment.

The matter is resolved.

The physician provides an explanation that is unsatisfactory to the Ministry

The Ministry provides the physician with formal communication (called the "initial opinion") that one or more of the claims are inappropriately billed. The physician may, within 20 days, provide the Ministry with additional information relevant in determining whether the billing was appropriate.

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Final Notice

If, after reviewing additional information the Ministry is still of the opinion that the physician's claims are inappropriate, it gives the physician final notice that if incorrect claims continue, they may be referred to the Physician Payment Review Board (Board). The physician can also request a hearing from the Board at this time.

Physician Payment Review Board (Board)

Once a final notice has been given to the physician, the Ministry may refer the matter to the Board for a hearing. The Board is an independent adjudicative tribunal that conducts hearings on billing disputes between physicians and the Ministry. After a hearing, the Board may order the physician to reimburse the Ministry if it has concluded that an overpayment was made, or order the Ministry to pay the physician if it has concluded that an underpayment was made.

Stage 3

If the physician does not agree with the Physician Payment Review Board's decision, an appeal process through the Ontario Divisional court can be sought.

tarily, it is very difficult to recover inappropriate payments. This is because the legislative changes introduced after the Cory Report restrict the Ministry from ordering a physician to repay an overpayment or incorrectly submitted claim unless it has an order from the Physician Payment Review Board (Board). The Board was established after the Cory Report to conduct independent reviews of payment disputes between physicians and the Ministry, to make the process fairer and more transparent for physicians. We noted that both Alberta and British Columbia have the ability to order a physician to repay overpayments without having to obtain an order from a similar Board. However, the Ministry rarely refers cases to the Board. In fact, since the Board's inception in 2010, only five cases have proceeded to formal hearings. This has resulted in inappropriate payments made but not recovered by the Ministry, as we explain in the next section.

Inappropriate Payments Made Were Not Recovered

We found many instances when even though the Ministry had evidence to confirm certain billings were not legitimate, it did not make an effort to recover overpayments from the physicians. For example:

- Through a proactive review in 2014, the Ministry identified a specialist who was billing a fee code the specialist was not eligible for. The amount at risk of overpayment was about $77,000 in 2010/11 and $59,000 in 2011/12. Although the specialist provided an unacceptable explanation of the billing to the Ministry, the Ministry did not attempt to recover the overpayment. We identified that this specialist continues to bill inappropriately. From September 2014 (the date the Ministry became aware that billing was inappropriate) to May 2016 (the time of our audit), the specialist had billed this code more than 380 times, for a total of approximately $121,700. After we brought this issue to the Ministry's attention, it indicated to us that it would follow up on this specialist.
- The Ministry identified, through the same proactive review, another specialist who was billing a fee code erroneously and identified $19,700 worth of overpayments. The specialist voluntarily paid back this amount to the Ministry. However, we noted that the Ministry did not pursue recovery for other inappropriate amounts billed by this specialist and the group of 28 other specialists he works with. We estimated the overpayment to be approximately $115,000 from April 1, 2012, to March 31, 2016.
- The Ministry acknowledged that other specialists are systematically billing one particular code inappropriately, and that it was a topic under consideration for future physician education. We identified 371 other specialists (beyond the previously mentioned group of 29) who were billing this code inappropriately and estimated that between April 1, 2012 and March 31, 2016, the overpayment amounted to approximately $2.44 million. However, the Ministry had no plans to investigate further or to pursue recovery of overpayments. The Ministry informed us that it did not have resources to pursue the case further.

4.5.4 The Ministry No Longer Follows Up on All Physicians Who Had Inappropriate Billings

Since the Ministry focuses its efforts on educating physicians whose billings are inappropriate and instructing them to correct future billings, we expected that an on-going monitoring process would be in place to ensure that physicians with problematic billing corrected future billings. However, we found that the Ministry does not follow up on all of these physicians. Prior to December 2014, the Ministry would initiate a follow-up with physicians about six months after sending a letter instructing them to correct their billing. In

December 2014, the Ministry decided to stop the automatic follow-up process and replace it with a case-by-case process, because its review indicated that most physicians complied with the Ministry's instructions, and that further monitoring was not necessary for all cases. However, we found that the Ministry's analysis supporting this decision was flawed: in our analysis of 34 physicians who billed inappropriately, 21 had previous instances of inappropriate billing, and eight of these were for the same issues.

RECOMMENDATION 10

To strengthen the oversight of fee-for-service payments to physicians to ensure that taxpayer dollars are fully recovered in situations of inappropriate billings, the Ministry of Health and Long-Term Care should:

- evaluate the costs and benefits of amending the fee-for-service billing review process and re-establishing an inspector function to oversee physician billings;
- effectively monitor billings and ensure physicians correct their inappropriate billings on a timely basis;
- establish an effective mechanism to recover overpayments from physicians when inappropriate billings are confirmed; and
- streamline the existing review and education process for physician billing.

MINISTRY RESPONSE

The Ministry welcomes and agrees with recommendations regarding the need to strengthen the Ministry's ability to monitor payments to physicians and recover public funds against inappropriate billings. These recommendations support the Ministry's commitment to protecting the sustainability of Ontario's public health-care system.

The Ministry will:

- consider re-establishing an inspector function to oversee physician billings;
- review existing policy and make recommendations where appropriate;
- review the physician payment accountability process;
- increase the ability to effectively monitor and ensure timely physician compliance with correcting inappropriate billing; and
- establish an effective mechanism to recover overpayments from physicians when inappropriate billing are confirmed through a streamlined review and education process.

Implementation of these items would require additional resources, policy and/or legislative changes.

4.6 Ministry Having Challenges Managing Health-Care Services Billed Under the Fee-for-Service Model

Utilization is the measure of the population's use of the health-care services available to it. In a fee-for-service payment model, utilization is an important topic, because a higher volume of services means higher health-care costs. As of December 31, 2015, the Ministry's most recent available data indicates that utilization for fee-for-service claims has been growing at an annual rate of 3.3%, which is higher than its yearly expenditure growth rate of 1.25% (see **Figure 19**).

Because utilization is difficult to predict, it is hard to manage health-care spending, particularly under a fee-for-service model. Many factors drive changes in the rate of health-care use. For example, when technological advances make services easier and quicker for physicians to deliver, the volume of services increases. Also, patient attitudes and expectations have an impact on the volume of services physicians provide.

However, in a taxpayer-funded health-care system, the decision to provide a service should be based on whether it is medically necessary. To determine whether a test or procedure is medically necessary is a professional judgment. There are also

Figure 19: Percentage Change of Total Fee-for-Service Payments, Based on Volume, 2010/11–2015/16
Source of data: Ministry of Health and Long-Term Care

	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16*
% increase	2.8	3.7	1.5	3.0	4.6	3.3

* Year to date as of December 31, 2015.

numerous evidence-based medical research studies that identify which treatments do not improve patients' outcomes. Choosing Wisely Canada publishes a list of over 175 tests and procedures that are not necessary under certain circumstances. For example:

- CT head scans should not be ordered in adults and children who have suffered minor head injuries;
- baseline electrocardiograms should not be ordered for patients without symptoms of heart problems undergoing low-risk non-cardiac surgery; and
- antibiotics should not be used in adults and children with uncomplicated sore throats.

One method of containing health-care costs in a fee-for-service model is through utilization management, that is, attempting to influence the volume of services provided by physicians—often, by increasing patient awareness.

In recent years, the Ministry has achieved some cost savings through utilization management and attempting to decrease medically unnecessary services. However, the actual savings realized from its initiatives were significantly less than expected. We noted the following examples:

- The Ministry targeted savings of $26.7 million for 2013/14 by reducing the number of colorectal cancer follow-up screenings as a result of aligning to Cancer Care Ontario's guidelines for follow-up screening intervals. The actual savings were $8.8 million—$17.9 million below the original target.
- The Ministry targeted a savings of $29 million for 2013/14 by eliminating annual physical health exams for healthy adult patients aged 18 to 64. The actual savings were $19.3 million—$9.7 million below the original target. In January 2013, the Ministry replaced the annual physical health exam with an annual health visit, because evidence states that an annual physical examination is ineffective in finding hidden disease in healthy people. If a physician determines that a physical examination is necessary, as for patients with chronic illness, then a full physical examination is still insured by OHIP.

Because of the difficulties the Ministry faced in containing costs under the fee-for-service model, it implemented across-the-board cuts in 2015, even though this is not an ideal or sustainable way to contain costs, as described in the following section.

4.6.1 Without an Agreement, the Ministry Imposed a 4.45% Cut Cumulatively to Physician Compensation with No Evidence-Based Justification

The Ministry and the OMA have had no agreement in place since the last Physician Services Agreement expired on March 31, 2014. Because the parties could not reach an agreement but the Ministry saw the need to contain costs, it implemented across-the-board payment reductions to physicians twice during 2015. These reductions were in addition to the 0.5% agreed upon in April 2013, and added up to 4.45% for fee-for-service billings. For physicians who receive payments over $1 million, the Ministry planned to reduce the payment by another 1% for the portion in excess of the first $1 million. (See **Appendix 1** for a summary of fee changes since 2004.)

However, these across-the-board reductions were not evidence-based and, in some cases,

disproportionately impact lower-earning physicians as opposed to higher-income physicians.

The *Health Insurance Act* requires that the Ministry establish a committee to provide advice and recommendations on timely and appropriate revisions to the fee schedule and other payment programs. These are meant to reflect current medical practice and meet the needs of the health-care system. The committee has the additional intent to continue to bring fees into greater relative balance in accordance with innovation, access, integration and competitiveness. For example, when cataract surgery was performed 10 years ago, the procedure took about an hour and the total fee was $516. Today, technological advancement has made this surgery much easier to perform and has decreased the time required to only about 15 minutes. As part of the committee's review, the total fee was reduced to $442 in September 2011.

We noted that the Medical Services Payment Committee (Committee) was established as part of the 2004 Physician Services Agreement and operated until the last agreement expired in March 31, 2014. Without an agreement between the Ministry and the OMA, there is limited collaboration to adjust individual fees.

A majority, 83%, of the physicians who responded to our survey believed that the current negotiation process between the Ministry and the OMA is neither productive nor sustainable. Only a small portion, 7%, said the current process is productive and sustainable, while the remaining 10% don't know or had no opinion. Many physicians commented that the current negotiation process should be more balanced and not one-sided.

A large number of the physicians who responded to our survey emphasized that patients' demands are the driving force behind health-care costs. Many suggested that patient accountability is required to ensure that only necessary services or procedures are performed and costs are not duplicated.

RECOMMENDATION 11

To ensure that the fees on the Schedule of Benefits reflect current medical practice and the needs of the health-care system, the Ministry of Health and Long-Term Care should:

- re-establish the Medical Services Payment Committee to provide regular reviews of physicians' fees and evidence-based advice on fee revisions; and
- assess the impacts that technological advancements have had on treatment times for consideration in adjusting fee-for-service codes.

MINISTRY RESPONSE

The Ministry supports this recommendation and is prepared to undergo a review of physician fees and assess the impact that technology changes have had on the time for service provision. The Medical Services Payment Committee (a bilateral body with representation from the OMA and the Ministry) has previously been established through the 2004 and 2008 Physician Services Agreement. The Ministry is willing to work with the OMA on a review of the Schedule of Benefits.

4.7 Ministry Has Recently Acted on the Significant Increase in Echocardiography Services Billed

The total cost of cardiac ultrasound services (also called echocardiography) performed on patients in Ontario increased by 19% from approximately $170 million in 2009/10 (for about 3 million procedures), to about $202 million in 2014/15 (for about 3.6 million procedures). In June 2016, the Ontario Association of Cardiologists (Cardiologists Association) published an open letter to the Auditor General regarding its specific concerns over cardiac-care spending. (**Appendix 3** contains the letter.) We met with representatives from the

Cardiologists Association to gain an understanding of their concerns.

4.7.1 Duplicated Payments on Ambulatory Cardiac Rhythm Monitoring Tests Not Recovered

The Cardiologists Association's **first concern** was:

1. *"We believe that certain ambulatory cardiac rhythm monitoring tests were, and are being, inappropriately over-billed to OHIP. They have been paid for without question for a number of years, costing the system millions of dollars. This continues despite cardiologists' urging the Ministry in July 2015 to put a stop to this practice. The government's inactions have encouraged the proliferation of these inappropriate billings, wastefully increasing the cost of cardiac care while eroding its quality."*

Based on our further discussion with the Cardiologists Association, we noted that their concern referred specifically to the Ministry paying twice for the same cardiac rhythm monitoring test performed on patients; essentially, physicians were being double-paid for performing one test. We followed up on this concern and noted that the Ministry, which was aware it double-paid physicians for cardiac rhythm monitoring tests in October 2014, had taken steps to address it prior to our audit. However, the Ministry did not plan to recover the overpayments, as described in the following account:

- In October 2014, the Ministry became aware of fee-for-service claims related to two specific cardiac rhythm monitoring tests that were inappropriately claimed and paid to physicians. The Ministry determined that approximately 70 physicians were overpaid at least $3.2 million between April 2012 and May 2015. However, at the time of our audit, the Ministry was not planning to recover any of the $3.2 million it had made in duplicate payments.
- The Ministry noted that the inappropriate billing was being orchestrated by a third-party company owned by non-physicians. The third-party company owned and supplied the technology used in the tests, and used the physicians' OHIP billing numbers to bill the Ministry on their behalf. The company then paid the physicians a portion of the fee. (Because this third-party company owned an advanced technology that can operate and monitor the test results even when patients are at home, this technology has made the test procedures much easier.)
- Upon the Ministry's request, the company stopped billing in this manner. In February 2016, the Ministry implemented changes to its billing rules to prevent further duplicate payments for these tests. We performed additional analysis after the new billing rules were implemented and noted further duplicate payments did not recur.
- The Ministry sent an OHIP bulletin to physicians in August 2015 to inform them of their responsibility to know what OHIP services are being billed in their name.

4.7.2 Cardiac Ultrasound Services Delivered by Commercial Lab Facilities Need More Oversight

The Cardiologists Association's **second concern** was:

2. *"In October 2015, the Ministry unilaterally decided to waive the longstanding requirement for a qualified physician to be present during the performance of cardiac ultrasound services. Quite predictably, this action has boosted the profits of commercial labs almost overnight. These labs provide services without a physician being present, and without regard to the appropriateness of these tests. Worse still, this Ministry decision has unleashed a flurry of new commercial interests whose sole goal is to drive-up utilization and maximize profits, further burdening the limited provincial health care budget."*

The Cardiologists Association questioned the Ministry's unilateral decision to change the fee for cardiac ultrasound services so that the same amount would be paid regardless of whether a physician was on-site performing the test, or off-site but still available to supervise. They criticized the decision for being made without adequate consultation with representatives from their specialty. The Cardiologists Association brought up two concerns:

- the decision has boosted the profits of commercial lab facilities; and
- these facilities provide services without regard to the appropriateness of the tests performed.

We asked the Ministry why it had made this change and obtained the following responses:

- The Ministry pointed out that the change was necessary to reflect advances in technological and remote access. A decade ago, when technology such as videoconferencing was not widely used, physicians' presence physically in a lab facility was necessary to ensure the appropriateness of the cardiac ultrasound services. As remote-communications technologies are now more commonly available, physicians' presence on-site may not be necessary for all services performed. This is especially true in remote areas where long-distance travel is a concern.
- The Ministry emphasized to us that appropriate physician supervision, although the physician might not be physically present, is still required to maintain the standards in performing cardiac ultrasound services. The supervising physician should still be within close proximity in case the physician present is required to care for a patient.

We noted, however, that before the Ministry made the decision, it had not done sufficient consultation with cardiologists, and that the change of requirement does increase the risk that cardiac ultrasound services could be delivered at commercial lab facilities without the presence of a cardiologist.

Profit Levels of Commercial Lab Facilities

With respect to the Cardiologists Association's concern over boosting the profits of commercial lab facilities, we reviewed billing data for echocardiographs from October 1, 2015 (the time when the change of requirement became effective) to March 31, 2016, and compared the volume of services to the same six-month period in the prior year (October 1, 2014, to March 31, 2015) to determine if the October 1, 2015, change to the billing rules had an impact on the number of services being performed. (As mentioned earlier, the Ministry changed the fees so that the same amount would be paid regardless of whether a physician was on-site performing the test or off-site but available to supervise.)

Our review of the Ministry's data found that the increase in the amount paid by the Ministry and the volume of services conducted was minimal—less than 0.1%. However, the Ministry should continue to monitor the volume of these services provided to ensure that only necessary services are being conducted with proper supervision.

In terms of whether the October 2015 change has led to the opening of more of lab facilities, the Ministry has no complete information to test this claim. The Ministry did not know how many lab facilities existed at the time and which were physician owned as opposed to commercially owned. Without sufficient information, the Ministry could not determine how many of the approximately 500 lab facilities operating now existed prior to the changed requirement or how many of them were newly opened as a result of the change. The Ministry funds the Cardiac Care Network (Network) to support the Local Health Integration Networks, hospitals and other care providers with the goal of improving quality, efficiency, access and equity in the delivery of the continuum of cardiovascular services in Ontario. Since April 2016, lab facilities that perform cardiac ultrasound tests are required to register with the new Echocardiography Quality Initiative program before they are paid by OHIP.

Appropriateness of Cardiac Ultrasound Tests Performed

With respect to the Cardiologists Association's concern over the appropriateness of cardiac ultrasound tests, we noted that the Ministry does not know which facilities are following appropriate standards or not, and it will not know until the new Echocardiography Quality Initiative program managed by the Network is proven to be effective in overseeing this service.

Because the Echocardiography Quality Initiative program has just started, at the time of our audit, the Ministry was not able to determine how effective the new program would be in deterring inappropriate use of echocardiography. In addition, the program does not apply to other preoperative cardiac tests, such as stress tests, chest x-rays, lung function testing and nuclear imaging, as explained in the next section.

4.7.3 Unnecessary Preoperative Cardiac Testing

Before the Cardiologists Association published their open letter to the Auditor General, we had analyzed cardiac care billing trends and volumes. Our audit found that the Ministry has had minimal success in attempting to control excessive preoperative cardiac testing.

Preoperative cardiac tests (procedures such as echocardiography, echocardiograms, stress tests, chest x-rays, lung-function testing and nuclear imaging) are performed before a patient undergoes surgery to examine if the heart is healthy enough to withstand surgery and anesthesia. National medical evidence shows that routine preoperative cardiac testing for patients undergoing low-risk surgery does not improve the outcomes of these surgeries. One of the recommendations of the Choosing Wisely Canada campaign is to avoid routinely performing preoperative cardiac testing on patients undergoing low-risk surgery.

In 2012, the Ministry identified preoperative cardiac tests as an area for potential savings. The Ministry targeted savings of $43.7 million for 2013/14 by reducing the number of unnecessary preoperative cardiac tests for patients undergoing low- to moderate-risk non-cardiac surgery. The actual savings were $700,000—$43 million short of the target—and were achieved through increasing physicians' awareness that preoperative cardiac tests were being overused. The Ministry later calculated that, for the fiscal year 2014/15 alone, approximately $35 million was paid to physicians for up to 1.15 million preoperative cardiac tests for low-risk surgeries that may not have been medically necessary.

As mentioned earlier, the Cardiac Care Network of Ontario has just started the Echocardiography Quality Initiative program to evaluate and assess the quality of echocardiograms performed by facilities. At the time of our audit, the Ministry was not yet able to determine how effective the new program, which was made mandatory in April 2016, would be in deterring inappropriate use of echocardiography.

RECOMMENDATION 12

To strengthen the oversight of the use of cardiac ultrasound services, the Ministry of Health and Long-Term Care should work with the Ontario Association of Cardiologists and the Cardiac Care Network of Ontario to:

- assess the effectiveness of the Cardiac Care Network of Ontario's Echocardiography Quality Initiative program intended to deter inappropriate use of cardiac ultrasound services;
- monitor the use of cardiac ultrasound services claimed by facilities, such as those owned by non-physicians, and take corrective actions when anomalies are identified; and
- recover the $3.2 million of over payments to physicians related to the cardiac rhythm monitoring tests that were inappropriately claimed.

MINISTRY RESPONSE

The Ministry welcomes this recommendation and will work with the Cardiac Care Network and professional organizations to assess the effectiveness of the accreditation process. The Ministry will continue to monitor the use of cardiac ultrasound services (echocardiograms) and take action where there are anomalies.

The Ministry will work with the Ontario Association of Cardiologists and the Cardiac Care Network to assess the impact of the Echocardiography Quality Initiative in ensuring that best-practice quality standards are applied in echocardiography service provision and that Ontario patients are receiving safe and appropriate care.

The Ministry acknowledges the third recommendation, but currently does not have authority to directly recover the estimated $3.2 million. The current process required to recover funds, under the conditions described in the *Health Insurance Act*, is described in **Figure 18** (Ministry of Health and Long-Term Care's Fee-for-Service Billing Review Process). The Ministry will review its options under the *Health Insurance Act* to determine the appropriate course of action regarding this particular recommendation.

4.8 Medical Liability Protection Costs Are Rising

4.8.1 Taxpayers Have Paid $567 Million over the Three Years from 2013 for the Rising Cost of Medical Liability Protection

Over the past few years, physicians' medical liability protection costs in Ontario have risen dramatically—and they are continuing to rise. The Ministry and taxpayers have had to bear the responsibility for these significant cost increases.

The Canadian Medical Protective Association provides legal advice and defence to physicians when medical–legal issues arise in their work. It also provides compensation to patients and their families who have been harmed by negligent care. The types of medical–legal difficulties the Canadian Medical Protective Association can assist physicians with include civil legal actions resulting from negligent care, complaints from the College of Physicians and Surgeons of Ontario and/or from hospitals, Ministry billing reviews and inquiries, human rights issues, criminal matters resulting from the practice of medicine and coroner's inquests. Unlike the United States, where physicians are responsible for paying for their own medical liability protection costs, all Canadian provinces, including Ontario, reimburse a portion of the costs. These reimbursement arrangements have been negotiated by the respective ministry and provincial medical association in lieu of other forms of compensation for clinical work.

Medical liability protection costs have been fluctuating since 2010, although the trend is a steep rise. Total membership fees decreased by 69% from $117 million in 2010 to $36 million in 2012, and then dramatically increased to $284.2 million in 2015—almost eight times higher than 2012 levels. The Canadian Medical Protective Association's 2017 membership fees in Ontario will be approximately $380 million. **Figure 20** shows the recent fluctuations and gives a breakdown of Ministry and physician portions of the membership fees.

The Ministry's contributions have fluctuated from nil in 2012 to about $329 million for 2016. We noted that for 2012 the Ministry exercised a provision of an arrangement between the Ministry, the OMA and the Canadian Medical Protective Association to use a large portion of a temporary surplus to reduce the annual membership fees for that year. However, the total membership fees were subsequently increased to address the resulting funding deficit and the rising medical liability protection costs reported by the Canadian Medical Protective Association. (Other reasons for the rise in medical liability costs are increases in legal costs to defend physicians and compensate patients.) The

Figure 20: Ontario Physicians and the Ministry of Health and Long-Term Care's Payments for Medical Liability Protection[1] ($ million)

Sources of data: The Ministry of Health and Long-Term Care; the Canadian Medical Protective Association

1. The allocation of payment between physicians and the Ministry is stipulated in a tripartite memorandum of understanding between the Ministry, the OMA and the Canadian Medical Protective Association and in a previous Physician Services Agreement for years 2010–2013, and in the 2012 Physician Services Agreement for years thereafter.
2. The Ministry's portion is zero in 2012 because the Canadian Medical Protective Association used the temporary surplus in its reserves to reduce its annual membership fee, and the total aggregate fee requirement of $36 million was paid entirely by physicians.

Ministry's portion of the membership fees has risen and is expected to be $335 million, or 87% of the total membership fees, in 2017.

In contrast, the physicians' portion of the contribution remains relatively stable, because over the last two decades the Physician Services Agreements have stipulated the amount of the membership fees to be paid by physicians. Because the rest is paid by the Ministry, it is the government that is responsible for bearing the costs of membership fees increases.

Ontario is not alone in reimbursing medical liability protection costs—all other provinces have a similar system in place. The percentage of the membership fees other provinces pay is not reported publicly, although based on our analysis of available information, Alberta and Saskatchewan both contribute over 85% of the membership fees, which is comparable to Ontario. However, we found that Ontario's dollar expenditure for medical liability protection costs, about $8,400 per physician in 2015/16, is 50% higher than what Alberta spends ($5,600 per physician) and almost double what British Columbia spends ($4,400 per physician). This reflects the higher costs of providing medical liability protection in Ontario. British Columbia and Saskatchewan are the only provinces that limit the total funding the government will put toward the protection costs, by specifying in their agreements with their physicians that physicians will share ongoing cost increases to medical malpractice protection.

A large majority of the physicians who responded to our survey, 90%, indicated that the Ministry should continue to substantially subsidize medical liability protection costs; the remaining 10% disagreed.

4.8.2 A Joint Effort between the Ministry, the OMA and the Canadian Medical Protective Association to Control Rising Liability Protection Costs Is Long Overdue

A joint effort between the Ministry, the Ontario Medical Association and the Canadian Medical Protective Association is required to review the legal context surrounding the dramatic increase in medical malpractice trends. Such a review is long overdue.

Although escalating medical malpractice costs were seen as a problem as early as the 1980s, at the time of our audit both the Ministry and the Ontario Medical Association have not taken the measures needed to control these costs. As far back as 1988 a Ministry-appointed lawyer stated that a responsible and effective review of the legislative areas relating to medical malpractice trends was long overdue, and that the delay was costing the public. However, when in 1995 the Canadian Medical Protective Association engaged a third-party consultant to review its operations amidst talk of the Ministry removing its contribution, the resulting report supported the status quo. As a result, the Ministry continued to pay the large fee increases that followed.

In both the 1997 and 2000 Physician Services Agreements, however, the Ministry and the Ontario Medical Association agreed on the urgent need to examine all the available alternatives for medical liability protection coverage. Both parties agreed on the importance of identifying alternative methods of providing coverage and considering reform of the law with respect to malpractice claims (for example, setting procedural limits on how claims can be filed and placing caps on the amount of damages that can be awarded). Similar issues were discussed in the 2004, 2009 and 2012 Physician Services Agreements, again emphasizing the need for legal reforms. However, senior representatives from both the Ministry and the Ontario Medical Association have confirmed that their discussions during the 2012 negotiations did not focus on protection costs.

Nevertheless, in March 2016, the Ministry retained a third-party consultant to carry out a review and make recommendations on how to reduce medical liability protection costs, improve the efficiency of the civil justice system with respect to medical liability, and ensure that plaintiff–patients in medical malpractice cases receive appropriate compensation in a timely manner. The draft report and recommendations are due to the Ministry by December 1, 2016, and the final report is due by January 15, 2017. Meanwhile, Canadian Medical Protective Association membership fees are higher in Ontario than in any other province. For example, the annual fee for a physician practising in obstetrics is close to $72,500 in Ontario, compared to $55,100 in British Columbia and Alberta, $34,200 in Quebec, and $27,700 in all other provinces and territories. **Figure 21** breaks down annual Canadian Medical Protective Association membership fees for selected different types of work by region.

RECOMMENDATION 13

To address the rising costs of medical liability protection, the Ministry of Health and Long-Term Care should work with the Canadian Medical Protective Association and the Ontario Medical Association to review the recommendations of the third-party report when it becomes available in early 2017, and take any necessary actions in an effort to reduce the cost burden on taxpayers.

MINISTRY RESPONSE

The Ministry welcomes this recommendation and looks forward to receiving the third-party report and its recommendations to reduce medical liability protection costs in Ontario. The Ministry will work with the Canadian Medical Protective Association, the OMA and other stakeholders to review the report's recommendations and to take the necessary actions to reduce medical liability protection costs while ensuring that patients receive appropriate compensation in a timely manner and that health-care institutions and health-care providers are accorded fair processes.

Figure 21: Annual Canadian Medical Protective Association Membership Fees by Regions and by Selected Types of Work Performed by Physician, 2016

Source of data: Canadian Medical Protective Association

Type of work[1]	Ontario ($)	British Columbia and Alberta ($)	Quebec ($)	All Other Provinces and Territories ($)
Geriatric medicine	2,300	2,100	1,800	1,700
Medical oncology	3,000	2,100	2,300	1,800
Family medicine excluding certain types of work[2]	4,400	3,600	1,900	2,100
Cardiology	5,000	4,200	2,800	2,300
Respirology	5,000	4,200	2,800	2,300
General pathology	7,700	5,300	5,100	4,200
Anesthesiology	12,300	10,800	6,100	4,700
Emergency medicine	12,300	10,800	6,100	4,700
Pediatric surgery	19,500	18,400	12,300	8,900
Vascular surgery	19,500	18,400	12,300	8,900
Obstetrics	72,500	55,100	34,200	27,700

1. There are more than 60 types of work specified by the Canadian Medical Protective Association. This list only includes selected types of work.
2. Excludes certain types of work: anesthesia, obstetrics, shifts in emergency departments and surgery.

4.8.3 Paying Physicians' Legal Costs in Billing Reviews Could Put the Ministry in a Conflict of Interest

In some cases, when the Ministry reviews physicians' billings and asks the physicians to provide medical records to support and verify their claims, the physicians may request assistance from the Canadian Medical Protective Association in defending their billing practices, including legal support for most serious cases. As it is the Ministry that pays for the majority of the amount of liability protection costs, we see this as a potential conflict of interest, because the Ministry has a reduced incentive to investigate wrongdoing if it must pick up part of the tab for the physicians' legal costs. The Ministry does not know the number of times that physicians request legal assistance from the Canadian Medical Protective Association lawyers during billing reviews, or the associated legal costs.

For example, during our review of the Ministry's review of physicians' billings, we came across letters from physicians' legal counsel replying directly to the Ministry on behalf of their clients. We were not able to assess which parties had paid the cost of these legal services, because the Ministry does not know if these are lawyers provided by the Canadian Medical Protective Association, or the physicians' own lawyers paid for out of pocket. The risk is that these lawyers are provided by the Canadian Medical Protective Association and thus paid for by taxpayer funds.

RECOMMENDATION 14

To avoid being placed in a conflict of interest when investigating physicians' billings, the Ministry of Health and Long-Term Care should work with the Canadian Medical Protective Association and the Ontario Medical Association to ensure that taxpayer funds are not being used to reimburse physicians for membership fees due to the Canadian Medical Protective Association for the use of lawyers provided by the Canadian Medical Protective Association to assist physicians with Ministry billing reviews.

MINISTRY RESPONSE

The Ministry supports this recommendation. The Ministry reimburses physicians for a portion of their Canadian Medical Protective Association (CMPA) membership fees, and historical tripartite Memorandums of Understanding (MOUs) between the Ministry, the CMPA and the OMA (including the most recent MOU) outlined that any increase in the Ministry's subsidy would exclude changes associated with defending fee disputes between an Ontario physician and the government or criminal matters involving an Ontario physician. In conjunction with the recommendations provided in the third-party report to be received in 2017, the Ministry will review the issue of whether taxpayer funds are being used to reimburse physicians for CMPA fees related to CMPA assistance with Ministry billing reviews.

Appendix 1: Summary of Fee Changes as per Physician Services Agreements of 2004, 2008 and 2012, and Other Reductions from April 1, 2014, to Present

Source of data: Ministry of Health and Long-Term Care

2004 Physician Services Agreement (Effective between April 1, 2004, and March 31, 2008)				
	2004/05	**2005/06**	**2006/07**	**2007/08**
Effective date	Between April 1, 2004, and March 31, 2008[1]	Between April 1, 2005, and March 31, 2008[1]	n/a	n/a
Fee change	2.5% increase to all family practice professional fees 2% increase to all specialist professional fees Targeted increase to over 600 fee codes in the Schedule of Benefits	1% increase to all technical fees	No change	No change

2008 Physician Services Agreement (Effective between April 1, 2008, and March 31, 2012)				
	2008/09	**2009/10**	**2010/11**	**2011/12**
Effective date	Between October 1, 2008, and September 30, 2009[1]	October 1, 2009	October 1, 2010	September 1, 2011
Fee change	3% global increase to all physicians	5% targeted increase[2]	3% targeted increase[2]	4.25% targeted increase[2]

No agreement between April 1, 2012, and September 30, 2012

2012 Physician Services Agreement (Effective between October 1, 2012, and March 31, 2014)		
	2012/13	**2013/14**
Effective date	n/a	April 1, 2013
Fee change	No change	0.5% global decrease to all physicians

No agreement since April 1, 2014

Ministry's Fee Reduction—April 1, 2014, to Present			
	2014/15	**2015/16**	**2016/17**
Effective date	February 1, 2015 and June 1, 2015	October 1, 2015	To be determined[3]
Fee change	2.65% global decrease to all physicians	1.3% global decrease to fee-for-service billings Targeted decrease to over 200 fee codes in the Schedule of Benefits	1% decrease for professional fee billings above the first $1 million

1. This change was only applicable for the specified period. Fees reverted to the original level after period end.
2. The "targeted increase" was applied only to specific fee codes in the Schedule of Benefits for Physician Services, as recommended by the Medical Services Payment Committee. Allocations to each clinical section were described in Section 3 of the 2008 Physician Services Agreement.
3. This change has not been implemented at the time of our audit.

Appendix 2: Physician Compensation Models Used in Different Jurisdictions

Prepared by the Office of the Auditor General of Ontario

	Advantages	Disadvantages	Examples and Prevalence
Fee-for-Service Model: Physicians are paid based on the type and number of services they provide to patients (e.g., physical exam, consultation, surgery). Each service has a specified fee.			
Patient perspective	• Patients do not have to enroll or sign up with any one specific physician	• Can increase the likelihood of unnecessary testing on patients • Incentivizes high volume of services, which may not equate to quality care	• Used worldwide, including all Canadian provinces and the United States
Service provider perspective	• Allows physicians to handle their own billings and can target their own incomes, which provides autonomy	• There are no monetary incentives to encourage a physician to engage in continuing professional development or to spend time on quality improvement	
Administrator perspective	• Provides the administrator with important data regarding specific services' utilization rates in order to assist in planning and decision-making	• Can increase the likelihood of unnecessary testing leading to over-servicing and increased cost • Does not allow for a predictable budget	
Per-Patient Base (for family physicians): Physicians are paid based on the number of patients enrolled for a basket of services under their care. There is a specified annual payment for each patient depending on factors such as age and gender.			
Patient perspective	• Physicians focus more on patient health outcomes than volume of services	• Physicians may not enroll high-needs patients, particularly when enrolment payments are not adjusted for the complexity of patients' needs and for multiple medical conditions	• Ontario, Quebec, British Columbia and Alberta's primary care models include enrolment-based payments for their family physicians • Medicare in the United States is mostly fee-for-service but is moving toward a per-patient base system
Service provider perspective	• Allows physicians more time to focus on managing complex conditions	• Physicians must abide by the terms of their contract with the administrator	
Administrator perspective	• Incentivizes physicians to control services provided, which minimizes unnecessary testing or over-servicing • Allows for a more predictable budget	• Data regarding types of services performed may be lacking if the physicians do not report all the services performed	

	Advantages	Disadvantages	Examples and Prevalence
Alternative Payment Plans: Physicians sign a contract with the Ministry to provide agreed-upon services. Alternative payment plans differ and can include a blend of payment models including fee-for-service, salary, bonuses and other incentives.			
Patient perspective	• Patients in under-serviced areas benefit from increased recruitment and retention	• No direct disadvantage noted	• Ontario uses alternative payment plans to encourage physicians to provide certain services, such as academic services, (including training new physicians and conducting research) as well as to provide emergency services in hospitals and to work in remote areas • Alberta and British Columbia have similar alternative payment plans
Service provider perspective	• Enhances income predictability and stability for physicians • Physicians are compensated for providing training to new physicians as a result of decreased clinical hours	• Physicians must abide by the terms of their contract with the administrator	
Administrator perspective	• Plans can be designed to address the changing needs of patient health care • May increase the recruitment and retention of physicians in under-serviced areas or needed sub-specialties (e.g., pediatrics and geriatrics)	• Data regarding types of services performed may be lacking if the physicians do not report all the services performed	
Salaried Physician Model: Physicians are paid a salary by the organization that they work for and are employees of that organization.			
Patient perspective	• Little risk to patients of unnecessary procedures, since physicians are not incentivized to increase volume of services	• No incentive to be more productive or focus on patient health outcomes, as salary is fixed	• Ontario physicians who practise in Community Health Centres are paid salaries, as they are employees of the organization • Physicians practising within Kaiser Permanente in the United States • Majority of family physicians in Sweden • Specialists in the United Kingdom
Service provider perspective	• No overhead costs for physicians • Physicians able to participate in continuing professional development	• Physicians must abide by the terms of their employment contract with the administrator	
Administrator perspective	• Funder is able to manage budget • Encourages efficiencies through the use of other health professionals in a multidisciplinary setting • Rewards physicians who stay at facility through increases in salary	• Responsible for overhead expenditures, staffing, pension, vacation and other benefits	

	Advantages	Disadvantages	Examples and Prevalence
Pay-for-Performance Model: Physicians are rewarded financial incentives for meeting certain performance targets.			
Patient perspective	• Improves patient outcomes, as long as physicians' compensation is tied to appropriate measures of quality care	• Physicians may choose patients whose health outcomes are likely to improve	• Family physicians in the United Kingdom • California has the largest pay-for-performance program in the United States • Medicare in the United States
Service provider perspective	• Rewards physicians financially based on a point system, which can include criteria such as patient outcomes, access to care, time spent with patients, etc.	• May undermine a physician's role to always focus on the patient first if points are not based on appropriate patient outcomes • Physicians may be penalized by uncontrollable factors such as patients' unwillingness to improve their health conditions	
Administrator perspective	• Funder is achieving value for payments made to physicians	• The point system relies on physicians' self-reported data • Collection of outcome data could be expensive	

Appendix 3

Open Letter from the Ontario Association of Cardiologists:

Ontario Association of Cardiologists

An Open Letter to the Auditor General of Ontario

Re: Ministry of Health and Long-Term Care Misuse of Public Resources

Bonnie Lysyk
CPA, CA, LPA, MBA
Auditor General of Ontario

20 Dundas Street West
Suite 1530
Toronto, ON M5G 2C2

June 7, 2016

Dear Ms. Lysyk,

The Ontario Association of Cardiologists (OAC) is calling on you, as the chief observer of provincial government fiscal accountability, to immediately undertake a review of the Wynne government's cardiac care spending, through the Ministry of Health and Long-Term Care (Ministry), and to report on what we consider to be the serious misuse of public resources.

As physicians and taxpayers, we are turning to you as a measure of last resort, having exhausted all avenues of reasonable discourse with Ministry officials. Our message to these officials has been clear and consistent. The Ontario government's unilateral actions of 2012 and 2015 have resulted in a lower quality of care at higher cost and increased utilization. These actions threaten the long-term viability of the health care system.

We are asking you to examine two issues involving cardiac tests. These are the most glaring examples of poor management, having been left completely unregulated for decades, despite persistent calls by cardiologists to regulate them.

1. We believe that certain ambulatory cardiac rhythm monitoring tests were, and are being, inappropriately over-billed to OHIP. They have been paid for without question for a number of years, costing the system millions of dollars. This continues despite cardiologists' urging the Ministry in July 2015 to put a stop to this practice. The government's inactions have encouraged the proliferation of these inappropriate billings, wastefully increasing the cost of cardiac care while eroding its quality.

2. In October 2015, the Ministry unilaterally decided to waive the longstanding requirement for a qualified physician to be present during the performance of cardiac ultrasound services. Quite predictably, this action has boosted the profits of commercial labs almost overnight. These labs provide services without a physician being present, and without regard to the appropriateness of these tests. Worse still, this Ministry decision has unleashed a flurry of new commercial interests whose sole goal is to drive up utilization and maximize profits, further burdening the limited provincial health care budget.

The people of Ontario need to be concerned that the Wynne government's mismanagement of health care is resulting in higher costs and lower quality care. We therefore request that you review these ill-conceived decisions that endanger lives and the sustainability of cardiac care in Ontario.

Respectfully,

James Swan, MD, F.R.C.P.(C) F.A.C.C.
President, Ontario Association of Cardiologists

c.c. Hon. Kathleen Wynne, Premier of Ontario
Mr. Patrick Brown, Leader, Official Opposition
Ms. Andrea Horwath, Leader, New Democratic Party of Ontario

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The Ontario Association of Cardiologists is a voluntary professional organization, representing Ontario cardiologists. Our board and members work each day with the provincial government, the Ontario Medical Association and the Ministry of Health and Long-Term Care to advocate for the specialty of Cardiology, to maintain and improve the quality of cardiac care in Ontario.

ontarioheartdoctors.ca

Appendix 4: Selected Patients' Satisfaction Survey Results, October 2014–September 2015

Source of data: Ministry of Health and Long-Term Care

	Patient Responses	
Selected Survey Questions	Always/Often (%)	Sometimes/Rarely/Never (%)
When you see your provider or someone else in their office, how often do they know important information about your medical history?	84	16
When you see your provider or someone else in their office, how often do they give you an opportunity to ask questions about recommended treatment?	85	15
When you see your provider or someone else in their office, how often do they spend enough time with you?	82	18
When you see your provider or someone else in their office, how often do they involve you in decisions about your care?	86	14
When you see your provider or someone else in their office, how often do they explain things in a way that is easy to understand?	92	8

Note: The Ministry of Health and Long-Term Care uses information collected from the Health Care Experience Survey (Survey) to better understand Ontarians' interactions with the health-care system. The Survey is a telephone survey given to a sample of Ontarians aged 16 years and older. Respondents are asked questions, among others, about their experiences with primary care and about integration of specialist with primary care. Only the selected questions regarding patients' experiences with primary care are included in this Appendix.

Appendix 5: International Comparison of Selected Survey Results among Ontario, Canada and Other Developed Countries, 2014

Source of data: The Commonwealth Fund 2014 International Health Policy Survey

	Canadian Comparison			International Comparison		
Selected Survey Question	Ontario Average (%)	Canada Average (%)	How Ontario Compares to Other Canadian Provinces	Commonwealth Fund Average* (%)	How Canada Compares to the Commonwealth Fund Average	How Ontario Compares to the Commonwealth Fund Average
% of patients who saw their physician on the same or next day	44	41	Rank 2 of 10	62	Rank 11 of 11	Worse
% of patients who thought it was very or somewhat difficult to get medical care in the evenings and on weekends or holidays without going to the emergency department	47	51	Rank 2 of 10	29	Rank 11 of 11	Worse
% of patients who went to an emergency department for a condition that could have been treated by the regular physician	39	37	Rank 7 of 10	28	Rank 10 of 11	Worse

* The Commonwealth Fund surveyed 11 countries: Australia, Canada, France, Germany, the Netherlands, New Zealand, Norway, Sweden, Switzerland, the United Kingdom and the United States.

Ministry of Health and Long-Term Care

Specialty Psychiatric Hospital Services

1.0 Summary

There are about 2,760 long-term psychiatric beds in 35 facilities (primarily hospitals) across Ontario. These beds are for children, adults and seniors who need treatment for the most severe or complex forms of mental illness. The beds are also for forensic patients—people who have, or are suspected of having, mental illness and who have been charged with a criminal offence.

About half (1,389) of these beds are located in four hospitals, called specialty psychiatric hospitals, that primarily provide mental health care. Our audit focused on these four hospitals, which are:

- Centre for Addiction and Mental Health (CAMH) in Toronto;
- Ontario Shores Centre for Mental Health Sciences (Ontario Shores) in Whitby;
- The Royal Ottawa Health Group (The Royal) with sites in Ottawa and Brockville; and
- Waypoint Centre for Mental Health Care (Waypoint) in Penetanguishene.

In 2015/16, these four specialty psychiatric hospitals treated about 7,200 patients and handled about 280,000 visits from out-patients (people who can manage their mental illness without needing to stay overnight at a hospital).

A referral is generally required for a person to be admitted to a specialty psychiatric hospital. Most patients are referred by general hospitals, family doctors, psychiatrists, or mental health community organizations.

When patients are ready to be discharged from a specialty psychiatric hospital but are not able to return home, or do not have a home to return to, the hospitals must co-ordinate with other care providers, such as supportive housing and long-term-care homes, to ensure that the patient's care needs will continue to be met.

The Ministry of Health and Long-Term Care (Ministry) is responsible for providing overall direction, funding and leadership for mental health care in Ontario. The Ministry provides funding to 14 regional Local Health Integration Networks (LHINs) responsible for planning and integrating health services in their respective region. LHINs enter into an accountability agreement with specialty psychiatric hospitals and provide funding to them. In 2015/16, specialty psychiatric hospitals received $673 million, which represents over 20% of the $3.3 billion the Ministry spent in total on mental health care.

Our audit found that for the past five years, specialty psychiatric hospital funding did not keep up with inflation or the increased demand for mental health services. To deal with this, these

hospitals have had to close beds, which has resulted in patients now waiting longer to access specialty psychiatric hospital services.

These hospitals have also changed their employee mix to include more part-time staff. It is not clear that current resources, including staffing, allow enough activities like group therapy, or therapy involving the use of facilities available at the hospitals (such as swimming pools) to occur. These are important to a patient's treatment and patients feel there are not enough of them.

Specialty psychiatric hospitals have not been able to deal with safety concerns to the degree that staff have requested. We also found that important patient file documentation, such as inclusion of patient risks in patient care plans or updates on the status of a patient's treatment, was missing from patient files.

The Ministry and LHINs have focused less on specialty psychiatric hospitals compared to other areas of health care, such as general hospitals. The Ministry has not created mental health standards to ensure that specialty psychiatric hospitals are consistent regarding which patients they admit, how they treat those patients and how those patients are discharged. While the Ministry collects wait time information and funds general hospitals based on the demand for their services, it does not do this for specialty psychiatric hospitals. Specialty psychiatric hospitals have to regularly complete and submit the same template of information that LHINs collect from general hospitals, however this template contains very little information that is specific to mental health care or specialty psychiatric hospitals. It asks many details that specialty psychiatric hospitals return blank because they are unrelated to them, such as the number of MRIs and breast screenings they perform to detect cancer. As a result, the Ministry and LHINs are not collecting the appropriate type of information to know how successful specialty psychiatric hospitals are in treating their patients.

The following are some of our significant observations:

- **Wait times for patients to receive treatment are long and getting longer:** In 2015/16, children had to wait more than three months to receive help for severe eating disorders at Ontario Shores. At Waypoint, the wait list for one of the main out-patient programs was so long that in 2015/16, the hospital temporarily stopped adding new people to the wait list, even though they required the treatment. Patients with borderline personality disorders (instability in mood and behaviour) waited about a month and a half in 2011/12 for a program at Ontario Shores. In 2015/16, they had to wait seven months. Our audit of hospital records over the past five years found evidence of two people who died by suicide while waiting for help.
- **More people could have been treated if patients were not staying in the hospitals longer than necessary as a result of a shortage of beds in supportive housing and long-term-care homes:** In the last five years, approximately one in 10 beds in specialty psychiatric hospitals was occupied by patients who no longer needed to be treated in the hospital but could not be discharged due to the lack of available beds in supportive housing or at long-term-care homes. The cost of care there is less than one-fifth of what it is at specialty psychiatric hospitals. In 2015/16, if the four specialty psychiatric hospitals had been able to find a place to discharge their patients as soon as required, the cost of caring for these people in supportive housing or long-term-care homes would have been $45 million less, and the hospitals would have been able to treat about 1,400 more people.
- **There is a lack of long-term psychiatric beds in some regions:** In 1988, the Ministry commissioned a report that recommended the Ministry ensure all residents have access to mental health services in their own communities or as close to them as possible. Almost 30 years later that is still not the case. In the

North Simcoe Muskoka LHIN, there are no beds for children with mental illnesses. Beds dedicated for individuals with addictions are only available in six of the 14 LHINs. The lack of needed care resulted in the Ministry spending almost $10 million between 2011/12 and 2015/16 to send 127 youths to the United States so that they could receive needed treatment.

- **Long-term psychiatric beds have closed across the province:** Between 2011/12 and 2015/16, there was a net reduction of 134 long-term psychiatric beds across the province. Thirty-two of those long-term beds that were closed were at specialty psychiatric hospitals. Bed reductions stemmed from the limited increase in funding specialty psychiatric hospitals got for their ongoing operations.
- **The Ministry and LHINs are not collecting relevant information for funding decisions:** During our audit, the Ministry increased funding for specialty psychiatric hospitals by 2%. This increase was not supported by actual demand for specialty psychiatric services; nor did it target programs that had the biggest need (wait lists) for treatment. Without mental health targets and relevant information, the Ministry or LHINs cannot make effective funding decisions.
- **Some patient files are being completed late and are missing required information, which could impact the patient's care:** Patient files we reviewed at CAMH and Ontario Shores were updated late or missing important information. During a patient's admission, key patient health and behavioural risks are identified. These risks should be documented in a patient's care plan. Some care plans we reviewed were missing this information. About 40% of the care plans were prepared late and were missing timelines for patients' treatment goals. We also found that hospital discharge plans were completed later than they should have been, which could increase wait times for beds.
- **The hospitals are increasing their use of part-time staff:** Over the past five years hospitals shifted toward hiring more part-time staff. The Registered Nurses Association of Ontario (RNAO) recommends that 70% of all nursing staff should be full-time to achieve best quality care results. In 2011/12, three specialty psychiatric hospitals employed at least 70% of their staff who provide direct patient care on a full-time basis. Five years later, one of the hospitals had a full-time staff level above 70% and all had fewer full-time staff overall. The mix of full-time and part-time staff varies between the hospitals, and none have a target for this mix.
- **The hospitals are spending less money on direct patient care than other comparator hospitals and their spending has decreased:** Since 2011/12 specialty psychiatric hospitals' spending on direct patient care has decreased by 2 cents, from 64 cents to 62 cents in 2015/16, out of every dollar that they receive from the Ministry. This is 5% less (3 cents) than the average of 65 cents that other comparator hospitals in Ontario spend on direct patient care. During this time period, specialty psychiatric hospitals had to deal with increasing costs without much additional funding from the Ministry for their ongoing operations.
- **There are not enough mental health emergency departments in the province:** CAMH has the only emergency department in Ontario that is exclusively for people experiencing mental health issues. This emergency department was first established in the 1960s. Although Ontario's population has doubled since then, no additional mental health emergency departments currently exist in the province. The Ministry has no plans to create additional ones.
- **Waypoint's new forensic building has had deficiencies since it opened in 2014 that have seriously impacted the safety of patients and staff:** In 2014, Waypoint opened

a new building to house its high-security forensic program. Since then, 90 deficiencies impacting staff and patient safety were identified. These deficiencies, including a poorly constructed fence and a broken electronic door-closing mechanism, contributed to over 800 reported safety hazards between 2014/15 and 2015/16 (related to staff assaults, property damage, vandalism and a patient climbing over a fence to leave without authorization). As a result of several hospital staff being assaulted and injured, including one who was stabbed by a patient, the Ministry of Labour was called in and issued seven compliance orders to address safety issues that occurred in the new building.

- **Without provincial mental health standards, the hospitals have each created their own standards for admission, treatment and discharge, resulting in patients being treated differently:** Ontario does not have provincial mental health standards and currently there is no set timetable to create them. In Ontario, each of the four specialty psychiatric hospitals develops their own standards pertaining to patient admission, treatment and discharge. These standards can sometimes differ resulting in differences of how patients with the same diagnosis are regarded by each hospital. One general hospital reported to us that it referred the same patient to two of the specialty psychiatric hospitals, and the patient met admission standards at one hospital, but was rejected at the other.
- **Specialty psychiatric hospitals have developed new treatment methods that show improved patient care outcomes:** Specialty psychiatric hospitals are implementing new treatment methods to better treat certain mental illnesses. For instance, Ontario Shores developed a new approach to treat certain schizophrenia patients that led to a decrease in the number of patients who were prescribed multiple anti-psychotic medications. Such medications have strong side effects. However, we found that there is no process for hospitals to share new treatment methods developed by their peers.
- **The Ministry has not done any analysis to learn why general hospital emergency room visits in Ontario related to mental health are increasing:** In the past five years, there has been a 21% increase in general hospital emergency department visits by people with mental illness. During that time, the percentage of repeat emergency visits within 30 days for substance abuse grew by 18% and for mental health by 9%. The Ministry has not conducted any analysis to determine why emergency department visits for mental health or substance abuse have increased.
- **Mental health information is not shared among the LHINs or with the police:** Only one LHIN has a database whereby all providers of mental health services can look up patients' information to identify all the care and services that patients are receiving. This ensures patients receive the care that they require and prevents duplication of care. A similar problem exists with the sharing of patients' information with the police. Police told us that some hospitals are not willing to share patient information. Without this information, the police have to assume patients who leave without authorization from specialty psychiatric hospitals pose a high risk of danger to the public, which can lead to a greater use of force.

This report contains 15 recommendations with 34 action items. It is the third in a series of three audit reports related to mental health care. The first report examines Child and Youth Mental Health, and the second examines Housing and Supportive Services for People with Mental Health Issues. For additional background information on mental health, refer to **Chapter 1**, "Introduction to Mental Health Audits."

OVERALL MINISTRY RESPONSE

The Ministry of Health and Long-Term Care (Ministry) appreciates the comprehensive audit conducted by the Auditor General and would like to take this opportunity to thank the Auditor General for providing these recommendations. The Ministry is committed to working collaboratively with its partners, making evidence-based decisions, and making improvements to sustain the health-care system in Ontario.

For over 30 years, the Ministry has focused on moving Ontarians from hospitals to the community, with appropriate supports. The Ministry is committed to funding and improving community services and supports to help Ontarians remain in their homes and communities wherever possible and prevent the need for more intensive and costly hospitalizations. The Ministry recognizes that there will be situations where an in-patient bed is required; however, in-patient stays should be as short as clinically necessary.

The Ministry is aware that additional planning and leadership are required to address mental health needs throughout the health-care sector, including the four stand-alone specialty psychiatric hospitals, six specialty psychiatric tertiary hospitals, close to 200 general hospitals with mental health beds, and more than 350 community agencies. To this end, the Ministry has established a Mental Health and Addictions Leadership Advisory Council and is working closely with the Council to strengthen system planning, accountability and integration across the mental health and addictions system. The Council, composed of representatives from diverse sectors, will provide expert advice on the implementation of the next phase of the Ministry's Mental Health and Addictions Strategy.

OVERALL RESPONSE FROM LHINs

The Local Health Integration Networks (LHINs) thank the Office of the Auditor General of Ontario and accept the observations and recommendations.

The effective delivery of high-quality mental health and addiction services is a priority for all LHINs. We will continue to work with the Ministry and health service providers to improve these services for Ontarians.

As health system planners, funders and integrators, LHINs will continue to support initiatives that create more timely access to mental health care and to create greater consistency with respect to outcomes and quality. In June 2015, the LHIN CEO Council approved the establishment of a Provincial Mental Health & Addictions (MH&A) Advisory Committee. This Committee brings together LHINs, associations, subject matter experts and other partners to share information, identify leading practices, advance priorities and develop recommendations to the LHIN CEO Council to support and inform Ontario's Mental Health and Addictions Leadership Advisory Council.

The LHINs' MH&A Advisory Committee has endorsed three pan-LHIN MH&A priorities:

- Objective 1: Ensure accessible and appropriate primary care for those experiencing MH&A conditions.
- Objective 2: Ensure better co-ordinated, centralized and integrated access points for MH&A services.
- Objective 3: Ensure availability of flexible service support housing options for key populations.

Action-oriented work groups have been formed around each of the three pan-LHIN priorities. These work groups have a mandate to develop, document and implement work plans to create change and positively impact the health and well-being of Ontarians affected by mental health and addictions issues.

OVERALL RESPONSE FROM HOSPITALS

The specialty psychiatric hospitals appreciate the comprehensive review from the Office of the Auditor General of Ontario. We share the commitment to ongoing performance evaluation, transparency and accountability to our patients, their families, staff and the communities we serve. Collaboration, implementation of best practices, care standardization and safety will continue to be key priorities for our hospitals. Each hospital has received exemplary standing from Accreditation Canada, and our joint work on the Mental Health and Addictions Quality Initiative is just one of the many examples of how our hospitals are striving for quality, collaboration and exemplary care each and every day.

We know the stigma and discrimination associated with mental illness can have as significant an impact as the illness itself. We are determined to eliminate stigma and create a society that is respectful, compassionate and supportive of those struggling with the devastating impacts of mental illness and addiction.

Our hospitals provide specialized treatment for individuals with the most serious and complex mental illnesses and addictions. Responding to delays in access to services is a priority. Often these delays are due to an increase in patient volumes, shortages of mental health professionals, and a broadening of programs and service areas with a corresponding increase in demand over time. The success of anti-stigma campaigns at the provincial and national levels is also encouraging people to seek help. We know the demand for our programs and services will continue to increase, and we are committed to working with our partners across all sectors to advance the mental health and addictions system across the continuum of care.

We have been very effective in meeting the objectives and targets as set out in our accountability agreements with our respective LHINs and feel that additional oversight would lead to increases in administrative reporting and costs. Our mental health indicators provide us with the impetus for achieving positive clinical outcomes for our clients and serve as effective organization targets.

A number of initiatives are already underway to enhance collaboration and standardization and support continuous quality improvement efforts, including a Provincial Wait Times Strategy and implementation of Quality Standards.

We will continue to work together and with our funders to address the areas that have been identified in this report and set priorities to ensure Ontarians have access to the high-quality care they need in a safe and therapeutic setting.

2.0 Background

2.1 History and Funding of Specialty Psychiatric Hospitals

In 1993, the Ministry of Health and Long-Term Care (Ministry) published a 10-year plan for mental health service delivery in the province. At that time, about $1.3 billion a year was being spent on mental health. About 60% of this amount went to 14 psychiatric hospitals and to other general hospitals that provided mental health care, with the remaining 40% primarily going to physicians and other community mental health service providers.

As part of its 10-year plan, the Ministry wanted to move patient care away from hospitals. To do so, it started to shift funding away from hospitals to less costly community-based care providers, such as the Canadian Mental Health Association. These providers deliver mental health care to individuals who typically continue to live in the community.

The Ministry also established the Health Services Restructuring Commission as part of its 10-year plan. The Commission's objective was to lead the process of hospital restructuring and to advise the

government on changes needed to improve the access, quality and cost-effectiveness of health-care services provided to Ontarians. The Commission decided that closing psychiatric hospitals or merging them with general hospitals would allow money previously allocated to them to be reallocated to community-based mental health care providers.

As a result, in the early 2000s, 10 of the existing 14 psychiatric hospitals were either closed or merged with general hospitals, leaving the four specialty psychiatric hospitals that exist today. **Figure 1** provides an overview of each of the four specialty psychiatric hospitals.

Since 1993, the Ministry's spending on mental health care has more than doubled to $3.3 billion in 2015/16. From this amount, specialty psychiatric hospitals received about $673 million, or more than 20% of the Ministry's total spending on mental health care. With the Ministry's shift towards community-based mental health care, less than 30% of the Ministry's total mental health care funding in 2015/16 was dedicated to providing care to mental health patients in general or specialty psychiatric hospitals.

During our audit, in April 2016, the Ministry created a dedicated mental health and addictions branch.

2.1.1 Oversight of Specialty Psychiatric Hospitals

The Ministry has overall responsibility for establishing a patient-focused, results-driven, integrated and sustainable publicly funded health system in Ontario.

The Ministry gives money to each of the 14 Local Health Integration Networks (LHINs). LHINs are responsible for using that money to plan, fund and integrate health services in their region, including mental health services. This includes about 2,760 long-term psychiatric beds located in 35 facilities (primarily in hospitals) across the province. About half (1,389) of these beds are in the four specialty psychiatric hospitals.

Each of the specialty psychiatric hospitals has an accountability agreement with its respective LHIN: Toronto Central (CAMH), Central East (Ontario Shores), Champlain (The Royal) and North Simcoe Muskoka (Waypoint).

These agreements identify the funding that the LHINs will provide to specialty psychiatric hospitals and the number of patients these hospitals are expected to treat. As part of the agreement, each quarter specialty psychiatric hospitals must report financial and operational information (such as the volume of patients that they treat) to their LHIN.

Figure 1: Specialty Psychiatric Hospital 2015/16 Overview

Source of data: Specialty Psychiatric Hospitals

	Centre for Addiction and Mental Health (CAMH)	Ontario Shores Centre for Mental Health Sciences (Ontario Shores)	The Royal Ottawa Health Group (The Royal)	Waypoint Centre for Mental Health Care (Waypoint)	Total
Location	Toronto	Whitby	Ottawa & Brockville	Penetanguishene	
Long-Term Psychiatric Beds as of March 31, 2016[1]	493	326	269[2]	301	**1,389**
Number of Staff[3]	2,141	1,054	883	997	**5,075**
Patient Discharges	4,470	645	1,223	904	**7,242**
Out-Patient Visits	96,421	65,937	97,647	19,193	**279,198**

1. In this report, any mental health bed not for the purpose of providing short-term mental health care located at a general hospital is considered a long-term psychiatric bed (including beds at specialty psychiatric hospitals, dedicated children's mental health beds and beds for patients whom the courts refer to hospitals for the assessment or treatment of a mental illness).
2. The Royal also has 100 beds that are used to house sentenced provincial offenders who are in need of mental health care. These are not long-term psychiatric beds and have been excluded from this total.
3. Number of staff refers to full-time equivalents reported to the Ministry.

Specialty psychiatric hospitals are public hospitals that fall under the *Public Hospitals Act*. The Act requires them to establish their own board of directors to oversee their operations.

2.2 Overview

2.2.1 Reasons for Admission to Specialty Psychiatric Hospitals

There are a number of different ways someone can be admitted to a specialty psychiatric hospital. A referral is generally required. Most patients are referred from general hospitals that do not offer the same level of specialized care as specialty psychiatric hospitals. Other patients are referred by their family doctors, psychiatrists (doctors who specialize in mental health) or mental health community organizations that provide support to people who are experiencing mental illness while living in the community.

People with mental illness who do not seek treatment on their own but are at risk of harming themselves or others can be referred to a specialty psychiatric hospital involuntarily by a psychiatrist or their family doctor. During 2015/16, about 25% of patients admitted to specialty psychiatric hospitals were admitted involuntarily. Should patients have any concerns about how they are treated at a specialty psychiatric hospital, they have access to Ministry patient advocates located at each hospital who can offer options and/or assistance to resolve their concerns.

Another group of patients at specialty psychiatric hospitals are those referred by courts and are called forensic patients. These are patients who have, or are suspected of having, mental illness and who have been charged with a criminal offence. These patients are referred to specialty psychiatric hospitals for assessments to determine whether they are fit to stand trial, or are "not criminally responsible" for an offence, or to get treatment.

In addition to programs for patients staying in the hospital, specialty psychiatric hospitals also offer out-patient services. Out-patient services are for individuals who can manage their mental illness without needing to stay overnight at a hospital. Examples of out-patient services include a visit with a psychiatrist to ensure prescribed medication is working, or group therapy. During 2015/16, the four hospitals had about 280,000 visits from out-patients.

2.2.2 Discharge from Specialty Psychiatric Hospitals

Specialty psychiatric hospitals and other mental health service providers work together to ensure that patients' needs are being taken care of in the most appropriate location.

When a patient is ready to be discharged from a specialty psychiatric hospital, the patient might not be able to return to their home or do not have a home to return to. For example, a senior might need the services of a long-term-care home, or an individual might require supportive housing because their mental illness is no longer something they can cope with on their own.

Specialty psychiatric hospitals must identify and co-ordinate with other service providers, such as supportive housing and long-term-care homes, to ensure that the patient's care needs will continue to be met upon their discharge from the hospital. If this is not planned for and co-ordinated in a timely manner, patients who are ready to be discharged from the hospital must continue to stay in the hospital until appropriate community service providers are found. **Figure 2** shows an overview of the way patients enter and leave specialty psychiatric hospitals.

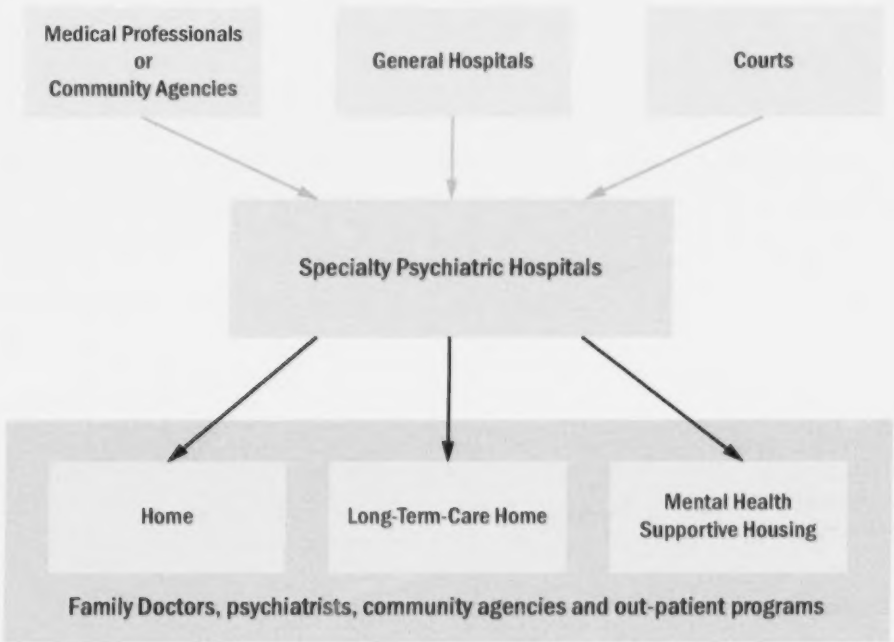
2.2.3 Types of Mental Illnesses Treated

Specialty psychiatric hospitals offer a broad range of mental health programs and treatments for various diagnoses and patient age groups.

The most common diagnoses treated include:

Figure 2: Common Ways People Enter and Leave Specialty Psychiatric Hospitals

Source of data: Specialty Psychiatric Hospitals



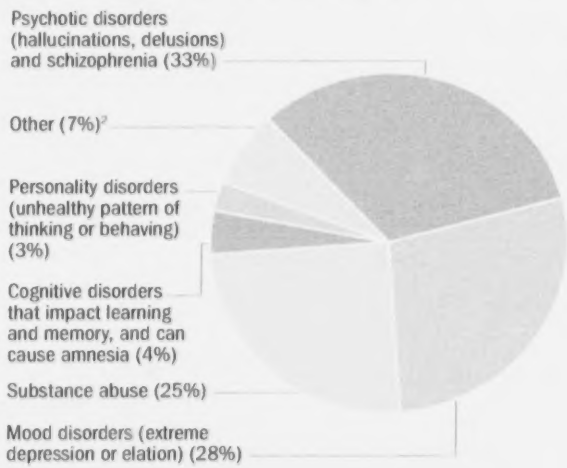
- psychotic disorders (symptoms include hallucinations, delusions and disordered forms of thinking);
- mood disorders (such as severe depression); and
- substance abuse.

The proportion of patients with these mental illnesses has remained constant between 2011/12 and 2015/16. **Figure 3** shows which mental illnesses were treated at specialty psychiatric hospitals between 2011/12 and 2015/16.

About 60% of specialty psychiatric hospital patients identified as male and 40% identified as female. This ratio was constant between 2011/12 and 2015/16. Similarly, these patients were primarily between the ages of 19 to 44. **Figure 4** shows the age of patients treated at specialty psychiatric hospitals.

Figure 3: Diagnosed Mental Illnesses of Specialty Psychiatric Hospital Patients[1]

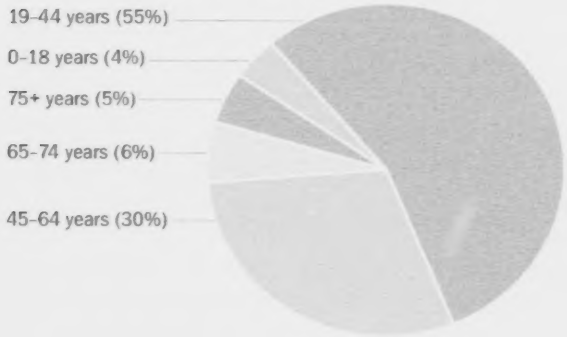
Source of data: Ministry of Health and Long-Term Care


Psychotic disorders (hallucinations, delusions) and schizophrenia (33%)
Other (7%)[2]
Personality disorders (unhealthy pattern of thinking or behaving) (3%)
Cognitive disorders that impact learning and memory, and can cause amnesia (4%)
Substance abuse (25%)
Mood disorders (extreme depression or elation) (28%)

1. Percentages represent the average between 2011/12 and 2015/16.
2. Other includes anxiety disorders (chronic and persistent feelings of apprehension), adjustment disorders (abnormal or excessive reaction to life stressors) and childhood disorders (a collection of various disorders that generally appear during childhood or adolescence related to inabilities to stay focused, communicate effectively or learn).

Figure 4: Age of Specialty Psychiatric Hospital Patients, 2011/12–2015/16

Source of data: Ministry of Health and Long-Term Care



2.2.4 Patient Categories and Programs

Four Patient Categories

There are four categories of patients who are admitted into specialty psychiatric hospitals:

- forensic patients (who are referred by courts);
- adults (aged 18 to 64);
- seniors (aged 65 and older); and
- youth (aged 12 to 17).

Hospitals have separate beds for each patient type. **Figure 5** shows the number of beds by specialty psychiatric hospital for each patient type.

Each Specialty Psychiatric Hospital Has Unique Programs

While each specialty psychiatric hospital offers similar programs, each individual hospital also offers its own unique specialty programs. The main unique specialty programs include:

- CAMH operates Ontario's only mental health emergency department;
- Ontario Shores offers treatment for children and youth with the most severe forms of eating disorders;
- The Royal has a crisis unit for its out-patients who require urgent care; and
- Waypoint has a high-security forensic unit for individuals deemed to be at the highest risk of violence to themselves or others.

3.0 Audit Objective and Scope

Our audit objective was to assess whether the Ministry of Health and Long-Term Care (Ministry), Local Health Integration Networks (LHINs) and specialty psychiatric hospitals had effective policies, procedures and processes in place to ensure that specialty psychiatric hospitals are providing mental health services that meet the needs of patients and the community in accordance with legislative responsibilities. We also assessed whether specialty psychiatric hospitals are effectively integrated into the Ontario health care system, resources are efficiently used and specialty psychiatric hospital effectiveness is measured, assessed and publicly reported on.

Senior management at the Ministry, LHINs and the specialty psychiatric hospitals reviewed and agreed with our objective and associated criteria.

In conducting our work, we met with key personnel at the Ministry and visited the four LHINs where specialty psychiatric hospitals are located (Central East, Champlain, North Simcoe Muskoka and Toronto Central) where we spoke with staff involved in the oversight of specialty psychiatric hospitals and reviewed related documentation and data.

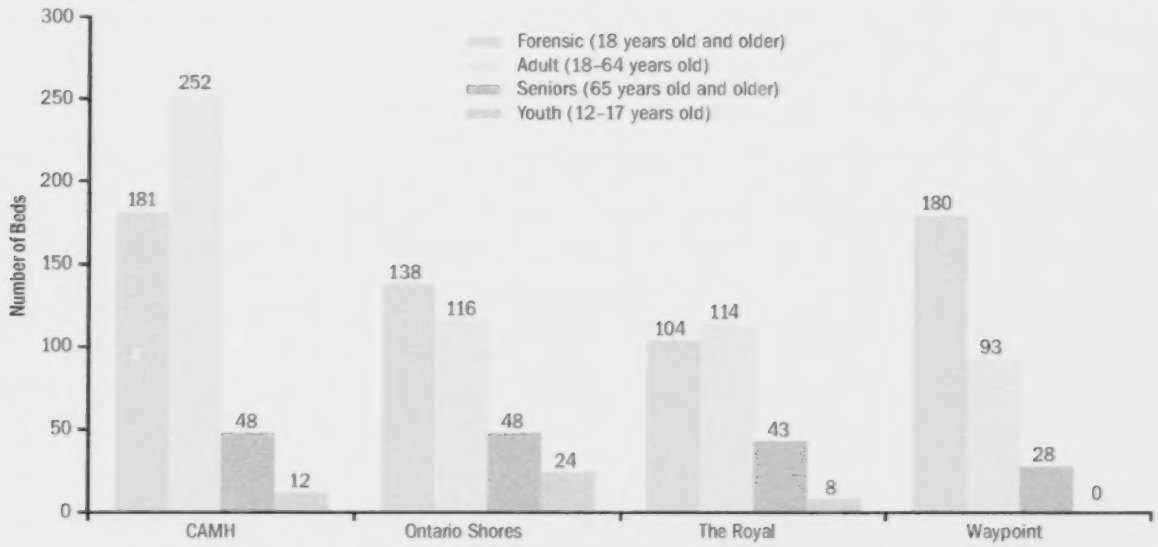
We also visited each of the four specialty psychiatric hospitals, where we interviewed senior and front-line staff to understand each hospital's operations, and examined related data and documentation. In addition, we performed a detailed review of patient files at two of the four hospitals, Ontario Shores and CAMH.

To understand specialty psychiatric hospital patient concerns, we interviewed current and former specialty psychiatric hospital patients and met with patient advocates at each hospital who are Ministry personnel and considered independent of the hospital.

To understand specialty psychiatric hospital staff concerns, we met with representatives from the Ontario Public Service Employees Union.

Figure 5: Specialty Psychiatric Hospital Beds by Patient Type, as at March 31, 2016

Source of data: Specialty Psychiatric Hospitals



To understand the challenges and needs of people with mental illness, we spoke with key representatives from Addictions and Mental Health Ontario and five Canadian Mental Health Association branches (located in Hawkesbury, Oshawa, Ottawa, Simcoe County and Toronto).

We also spoke with key representatives from six general hospitals and five police departments (located in Barrie, the Greater Toronto Area, Midland, Orillia, Ottawa and Whitby) to gain an understanding of their interactions with specialty psychiatric hospitals.

To better understand the challenges specialty psychiatric hospitals face with discharging their patients, we spoke with two supportive housing providers and three long-term-care homes (located in Midland, Ottawa and Toronto).

We researched mental health standards used in other jurisdictions and spoke with the Nova Scotia Health Authority about mental health standards used in that province.

4.0 Detailed Audit Observations

4.1 Patients Suffering From Longer Waits

Time spent on a wait list to get into a specialty psychiatric hospital or to receive care is time when a patient with mental illness is not receiving the required specialized care. This can result in a worsening of their already severe mental illness and can increase the risk of harm the patient poses to themselves or others. It also increases the likelihood that an emergency department visit will be needed to obtain immediate care.

4.1.1 Wait Times are Long and Getting Longer

We obtained wait time information by hospital program for the past five years from three of the four specialty psychiatric hospitals (Ontario Shores, The Royal and Waypoint). CAMH does not collect

such information because the majority (70%) of its patients come through its emergency department. Instead, it measures the amount of time a person must wait in the emergency department before being admitted to a hospital bed.

As of July 31, 2016, there were a total of 159 people waiting for a bed and there were about 5,000 people waiting to enter an out-patient program at the three specialty hospitals that provided us wait time information.

We found that wait times for mental health programs offered by the three hospitals are long. For example, in 2015/16, 9 children had to wait more than three months to receive help for severe eating disorders at Ontario Shores.

Figure 6 shows the in-patient programs with the longest wait times at each hospital. In **Appendix 1** we list the wait times for the remaining in-patient programs. **Figure 7** shows the out-patient programs with the longest wait times.

Wait times are also growing. On average, patients now wait longer for beds and out-patient programs than they did five years ago at each of the three specialty psychiatric hospitals. For example, to get into a bed at Ontario Shores, patients with the same diagnosis in 2015/16 waited three weeks longer than they would have five years earlier. **Figure 8** shows the growth in wait time for beds at each hospital and **Figure 9** shows the growth in wait time for out-patient programs.

On average, in 2015/16, patients must now also wait three hours (or about 40%) longer than five years ago in CAMH's emergency department before being admitted as an in-patient to one of its hospital beds. That is, the average wait is 10.8 hours compared to 7.8 hours five years ago.

We looked at changes in wait times between 2011/12 and 2015/16 for specific in-patient programs at each hospital and noted that, for 60% of the programs, the wait became longer. For example:

- Five years ago, patients waited approximately one week for a bed in a recovery program at The Royal that helps them develop life skills to live on their own. In 2015/16, the wait was just over three months.
- The wait for a bed in a program for people with both a mental illness and substance abuse at Waypoint doubled from one and a half months in 2011/12 to close to three months in 2015/16.

We also discovered increases in wait times for some out-patient programs. For instance:

- Those with borderline personality disorders (instability in mood and behaviour) waited about a month and a half in 2011/12 for a

Figure 6: The Top Two In-Patient Programs at Specialty Psychiatric Hospitals with the Longest Wait for Patients to be Admitted, 2015/16[1]

Source of data: Specialty Psychiatric Hospitals

Specialty Psychiatric Hospital	Description of Patients Treated by Program	Days Waited for Admission[2]
Ontario Shores	• Youth specialized eating disorder program	105
	• Forensic patients[3]	268
Waypoint	• Substance abuse and mental illness	85
	• Forensic patients[3]	48
The Royal	• Recovery program	80
	• Addictions	43

1. CAMH was not included in this chart because it does not centrally collect in-patient wait time information. This is because the majority (70%) of its in-patients come through its emergency department.
2. The hospitals measure median wait times of programs. Therefore, half of the people admitted waited longer than the days listed below.
3. Forensic patients could be awaiting admission in several places. Some may wait at another hospital; some wait in jail.

program at Ontario Shores. In 2015/16, they had to wait seven months.

- People with schizophrenia waited about a month and a half in 2011/12 to enter a program at The Royal. In 2015/16, they waited over three months.

At Waypoint, the wait list for one of their main adult out-patient programs was so long that in 2015/16, the hospital temporarily stopped adding new people to the wait list, even though they required the treatment. The hospitals' staff attributed the longer waits to higher demand for mental health services, sometimes from outside the regions where they are located, and to program changes that extend patients' length of stay.

Figure 7: The Top Two Out-Patient Programs at Specialty Psychiatric Hospitals with the Longest Wait for Patients to Obtain Treatment, 2015/16

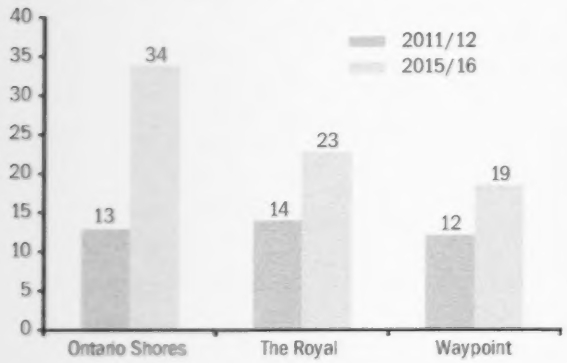
Source of data: Specialty Psychiatric Hospitals

Specialty Psychiatric Hospital	Description of Patients Treated by Program	Days Waited for Treatment*
Ontario Shores	• Borderline personality disorder	373
	• Traumatic stress	364
Waypoint	• General adult	23
	• Geriatric	29
The Royal	• Mood and anxiety	193
	• Sleep clinic	241
CAMH	• People experiencing issues with their gender identity, including those who want gender-transition surgery	141
	• Women with a history of trauma and mental illness	118

* The hospitals measure median wait times of programs. Therefore, half of the people treated waited longer than the days listed below.

Figure 8: Wait for Beds at Specialty Psychiatric Hospitals, 2011/12 and 2015/16 (Days)[1,2]

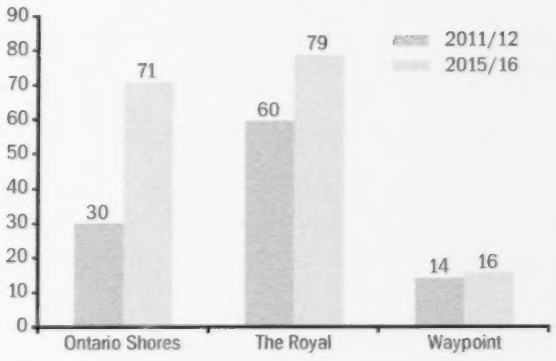
Source of data: Specialty Psychiatric Hospitals



1. CAMH is not included in this comparison because its wait times are not comparable to those of the other hospitals. CAMH tracks its wait times via the emergency department, while the other hospitals measure the wait from the time of referral to admission.
2. The hospitals measure median wait times of programs. Therefore, half of the people admitted waited longer than the days indicated below.

Figure 9: Wait for Out-Patient Programs at Specialty Psychiatric Hospitals, 2011/12 and 2015/16 (Days)[1,2]

Source of data: Specialty Psychiatric Hospitals



1. CAMH is not included in this comparison as its central tracking of out-patient wait times was introduced only in 2014.
2. The hospitals measure median wait times of programs. Therefore, half of the people admitted waited longer than the days indicated below.

4.1.2 Wait Times Not Reported

While the Ministry collects and publicly reports wait times for a number of services offered at general hospitals, it does not do so for specialty psychiatric hospitals. This is because the Ministry has not developed a consistent way for specialty psychiatric hospitals to measure or report wait time information.

Currently, specialty psychiatric hospitals measure wait time information differently from each other. The Royal tracks it starting from the date when one of its psychiatrists determines that a patient needs treatment, whereas Ontario Shores and Waypoint start tracking wait times from the date when they receive a patient's referral. The hospitals track wait time information mostly for internal use only. Each of the specialty psychiatric hospitals publicly report wait time information for some of their programs; however, it is up to each hospital to decide what they want to report. Because the hospitals measure wait times differently, this information cannot be used to compare wait times for beds or programs among the four hospitals.

In 2014, the Ministry provided about $2.5 million to specialty psychiatric hospitals to develop a consistent way to begin to measure wait times. This work is expected to be completed in 2017, but will only allow the hospitals to measure wait times for some of the services that they offer. Going forward, the Ministry does not have a clear plan for developing a consistent way to measure wait times for all specialty psychiatric hospital programs and to publicly report them.

4.1.3 General Hospitals Need Wait Time Information

Because the Ministry is not collecting and reporting wait times, as it does for services provided by general hospitals, neither the LHINs nor the Ministry is analyzing the exact length of time people wait on average for mental health services or, as our audit found, that wait times are growing and the impact that this is having.

We spoke with staff at general hospitals who identified that the lack of public reporting on wait times for mental health services at specialty psychiatric hospitals impacts them and their patients. General hospitals refer their patients to specialty psychiatric hospitals. As wait time information is not being publicly reported, general hospitals can only find out wait times for specialty psychiatric hospital beds by directly contacting them. Otherwise, general hospitals do not know how long it will take to have their mental health patients admitted into a specialty psychiatric hospital or if wait times are improving or worsening compared to previous months.

Patients would also benefit from public reporting of wait times because some patients, such as those living between Ontario Shores in Whitby and CAMH in Toronto, might have several options where they can obtain mental health services.

4.1.4 Suicides Recorded While Waiting for Service

One of the most significant consequences of longer wait times is the potential of persons harming themselves. Ontario Shores and The Royal record the reason a person drops off of their wait lists, whenever this information is provided from the source of a person's referral.

We reviewed available records and found that in the last five years, Ontario Shores and The Royal are aware of seven people in total who died while waiting for a bed or an out-patient program. While the cause of death is not always provided to the hospitals, their records indicated that at least one person died by suicide while waiting for help. While one of the other specialty psychiatric hospitals has not been formally tracking such information, we found its records also showing that one person died by suicide before they could be admitted to a bed.

We identified an instance in which a person died by suicide two days before their planned admission into the hospital after a six-week wait. The individual's spouse had indicated in discussion with this

hospital's staff that they felt the individual's illness had played a factor in the suicide.

Because hospitals either do not record or are not always provided with information regarding the reason patients drop off their wait lists, the total number of deaths of individuals waiting for specialty psychiatric hospital services and their cause are not fully known.

RECOMMENDATION 1

In order to ensure Ontarians know how long they need to wait for specialty psychiatric hospital services, the Ministry of Health and Long-Term Care should:

- as soon as possible develop a consistent way to measure wait time information from specialty psychiatric hospitals;
- collect wait time information for in-patient and out-patient programs; and
- publicly report this information.

MINISTRY RESPONSE

The Ministry accepts this recommendation and is working to standardize wait time definitions and collect wait time information for specialty psychiatric hospital services. Once a standardized definition for wait times is in place, wait time information will be collected, monitored and publicly reported for both in-patient and out-patient programs.

The Ministry is providing funding over three years (2014/15 to 2016/17) to the Centre for Addictions and Mental Health (CAMH) to support the Access to Care Initiative. The Mental Health and Addictions Access to Care Initiative (ATC)—a partnership among the specialty psychiatric hospitals—aims to address significant gaps in access to care by using data from the four hospitals to track specific wait times, identify service gaps, and build a structure for public reporting and accountability. The overall goal of the ATC initiative is to develop a comprehensive, province-wide approach to improve access to care for mental health and addictions patients.

4.2 Patients Who No Longer Need Psychiatric Hospital Care Cannot Be Discharged

While wait lists for admission to the specialty psychiatric hospitals are growing, more of their beds are being occupied by people who do not need the care they provide. The Ministry has not ensured that there are enough beds at other health care facilities (such as supportive housing for those with mental illness and in long-term-care homes) to care for patients who are ready to be discharged from the specialty psychiatric hospitals. This has resulted in more specialty psychiatric hospital beds being occupied by people who no longer need to be hospitalized and increased costs to the province as a result of caring for these patients in a hospital longer than was actually needed.

4.2.1 Specialty Psychiatric Hospital Beds Are Being Used by People Who Do Not Need Hospital Care

Instead of providing specialized mental health care, specialty psychiatric hospitals are now more and more playing the role of long-term-care homes for patients with dementia, brain injury or intellectual disability, or the role of supportive housing.

We found that in the last five years approximately one in ten beds in specialty psychiatric hospitals was occupied by someone who did not actually need hospital care but could not be discharged due to the lack of available beds in supportive housing or at long-term-care homes. Over the past five years this problem has become worse. We reviewed patient discharge information at each of the four hospitals and found that in 2015/16 it took them on average almost a year to transfer a patient to supportive housing or to a long-term-care home. This is an increase compared to 2011/12, when on average patients remained in the hospitals 235 days waiting to be transferred to supportive housing or a long-term-care home after no longer requiring specialty psychiatric hospital care.

Figure 10 shows the percentage of patients at each specialty psychiatric hospital that should have been discharged in 2011/12 and 2015/16. This percentage has increased in three of the four specialty psychiatric hospitals.

4.2.2 Timely Discharge Would Lead to Hospitals Seeing Hundreds More Patients

We compared the number of days patients were in each specialty psychiatric hospital while no longer requiring hospital care with the average patient length of stay at each hospital. Based on this comparison, we estimate that in 2015/16 alone if the four specialty psychiatric hospitals had been able to find a place to discharge their patients as soon as they should have been, they would have been able to admit and care for about an additional 1,400 people. This would significantly reduce wait times, especially for seniors.

Patients who get better and are ready to leave should therefore be discharged in a timely manner. This ensures that beds become open for those on the wait list and health care dollars are spent efficiently.

4.2.3 Shortage of Resources Delays Discharges

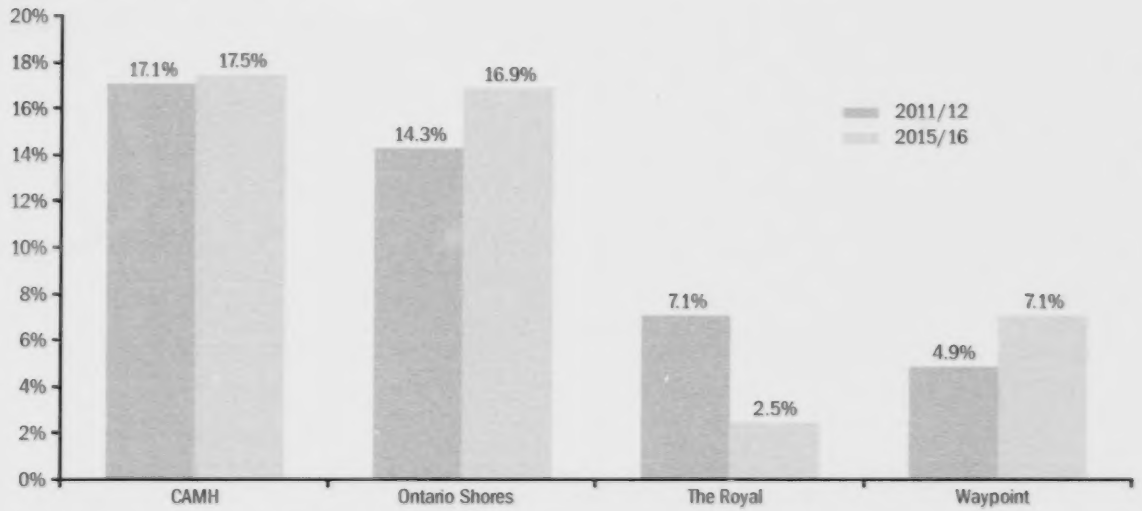
We spoke with representatives from three long-term-care homes about the challenges that they face with accepting patients from specialty psychiatric hospitals. They said that even when they do have open beds, they are sometimes hesitant to accept these patients because they lack properly trained staff, such as behavioral therapists, to look after them.

The problem of finding a place for these patients is further exacerbated by the fact that there is a greater demand for beds in general than supply at supportive housing and long-term-care homes. In our Hospital Operations audit included in this Report, (**Section 3.08** in **Chapter 3**) we found that there were 1,854 people waiting in hospitals in Ontario for an open spot in a long-term-care home as at March 31, 2016.

In our audit of housing and supportive services for people with mental health issues (**Section 3.07** in **Chapter 3**), we found that on the largest centralized wait list for supportive housing in Ontario, for every applicant that came off the wait list in 2015/16, nearly six new applicants joined the list.

Figure 10: Percentage of Beds Occupied during the Year by Patients Who Should Have Been Discharged* but Could Not Be, 2011/12 and 2015/16

Source of data: Specialty Psychiatric Hospitals



* As determined by the Specialty Psychiatric Hospital.

4.2.4 Discharge Delays Increase Costs of Care

Specialty psychiatric hospitals are designed to look after those who suffer from the most complex and severe mental illness. They provide the highest level of care, which is also the most costly.

In 2016, the average cost to care for a patient for one day at a specialty psychiatric hospital was about $930. However, the cost to the Province of treating a patient at supportive housing or long-term-care homes ranged from $68 per day for supportive housing to $166 for a long-term-care home, which is less than one-fifth of what it costs to care for a patient at specialty psychiatric hospitals. In 2015/16, based on the difference in cost between treating a patient in a specialty psychiatric hospital and treating a patient in a nursing home or supportive housing, the cost of providing care that was no longer necessary was about $45 million. Had patients been discharged from the specialty psychiatric hospitals as soon as they no longer needed hospital care, this money would have been used to care for patients on wait lists who actually need the specialized care offered by specialty psychiatric hospitals.

RECOMMENDATION 2

In order to ensure that wait times are reduced and that health care dollars are spent in the most efficient way, the Ministry of Health and Long-Term Care, together with Local Health Integration Networks, should identify the causes and address the shortage of supportive housing and long-term-care home beds available for patients that cannot be discharged from specialty psychiatric hospitals.

MINISTRY RESPONSE

The Ministry is working to improve the services provided to people with mental illnesses and addictions along the continuum of care. The Ministry recognizes the important role of clinicians in discharging patients back to their homes and communities, including long-term-care (LTC) homes and supportive housing, if patients require this level of support.

The government's Long-Term Affordable Housing Strategy, along with the Mental Health Leadership Advisory Council's work on supportive housing, will provide information and advice on addressing shortages of supportive housing for people with mental illnesses and addictions. The Strategy includes investing $16 million over three years starting 2014/15 to create 1,000 new housing spaces for people with mental health or addictions issues.

The Ministry is working closely with the LHINs to monitor the need for LTC home beds throughout the province and is currently examining future needs for LTC home capacity and planning accordingly.

The Ministry is also developing a provincial capacity planning framework to support integrated and population-based health planning. The framework will support the Ministry, LHINs and health system partners by providing access to consistent data and guidance on planning activities. Once developed, the capacity planning framework will help support the provision of care in the most appropriate setting possible across the health-care continuum.

RESPONSE FROM LHINs

This recommendation encourages the Ministry and LHINs to continue their work together to address the capacity of specialized beds for patients with mental illnesses and addictions in LTC homes, and of supportive housing beds.

The LHINs' Provincial MH&A Advisory Committee has endorsed three pan-LHIN MH&A priorities, including the availability of flexible service support housing options for key populations. As well, LHINs have been active participants in the Ministry's Enhanced Long-Term Care Home Renewal Strategy.

4.3 Long-Term Psychiatric Beds Closed across Province

While patients no longer requiring the hospitals' specialized care take up more beds waiting for discharge, the number of beds in specialty psychiatric hospitals has decreased in the past five years. The result is that fewer patients who require their care are receiving it.

Between 2011/12 and 2015/16, there was a net reduction of 134 long-term psychiatric beds across the province. Thirty-two of the long-term beds that were closed were at specialty psychiatric hospitals.

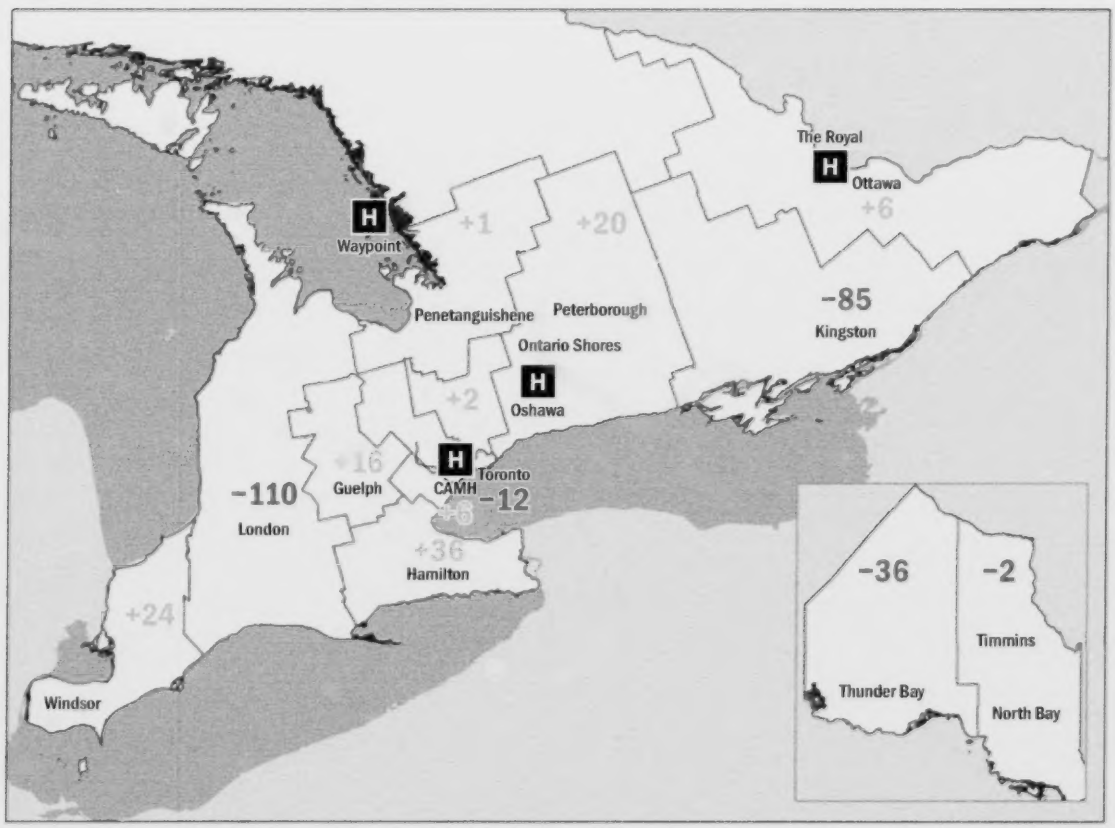
4.3.1 General Hospitals Impacted by Bed Closures

We met with staff and management from three general hospitals located near CAMH and Ontario Shores to find out what impact these bed closures had on their patients. One hospital informed us that since the closure of CAMH's schizophrenia beds, they are having more trouble finding specialty psychiatric hospitals to which they can refer their patients with schizophrenia.

One hospital that is located close to Ontario Shores told us that there have been over 20 admissions into the hospital for mental health care as a direct result of beds closing at Ontario Shores. Another hospital said that it now has a harder time referring its patients to Ontario Shores. Staff said their hospital's emergency department patient length of stay has increased over the past few years. The hospital partially attributes this to the bed closures at Ontario Shores.

Overall, 5% of the long-term psychiatric beds that existed five years ago in the province have been closed. **Figure 11** shows the changes in the number

Figure 11: Change in the Number of Long-Term Psychiatric Beds between 2011/12 and 2015/16, by LHIN
Prepared by Office of the Auditor General of Ontario using data from Ministry of Health and Long-Term Care



of long-term psychiatric beds in each LHIN between 2011/12 and 2015/16.

4.3.2 Not Enough Long-Term Psychiatric Beds Available across Province

In 1988, the Ministry commissioned a report that recommended that the Ministry ensure all residents in Ontario have access to mental health services in their own communities, or as close to their own communities as possible. Due to the absence of target levels of service across the province, almost 30 years later this is still not the case for sufferers of the most complex and severe forms of mental illness. For example:

- In the North Simcoe Muskoka LHIN, there are no dedicated mental health beds for children. This meant that in 2015/16, 129 children within the region had to travel outside of the LHIN (including regularly to North Bay, which can be over 300 kilometres away for some residents of the LHIN) to access in-patient services. This puts additional strain on families, who must now travel farther to spend time with their child while admitted to a hospital outside the region.
- Dedicated hospital beds for individuals with addictions are only available in six of the 14 LHINs. While the Ministry indicated that additional addiction beds might exist in other hospitals in different LHINs, it does not have enough information to determine the exact number of these beds in each LHIN or across the province used to treat addiction patients. Patients who cannot access hospital services for addictions must travel to a different region to access services, obtain services from community providers who might not be able to deliver as intensive a level of care as a hospital, pay for services from a private provider, or go without treatment.
- The lack of needed services in Ontario between 2011/12 and 2015/16 resulted in the Ministry spending almost $10 million to send 127 youth to the United States to obtain mental health services (primarily for severe eating disorders) as the needed specialty services were not available in Ontario. Additional programs and services were started in Ontario (such as Ontario Shores' program for children and youth with the most severe forms of eating disorders, which opened in 2014) during this time period to reduce the number of children needing to obtain mental health treatment in the United States.

Overall, the number of long-term psychiatric beds varies from one bed per 2,300 people in the Waterloo Wellington LHIN region to one bed per 90,200 people in the Central LHIN region. See **Figure 12**.

Figure 12: Number of Residents for Each Long-Term Psychiatric Bed, by LHIN (2016)

Source of data: Ministry of Health and Long-Term Care

LHIN	# of Residents per Long-Term Psychiatric Bed[1]
Central	90,242
Mississauga Halton	78,649
Central West	66,808
Erie St. Clair	11,641
Hamilton Niagara Haldimand Brant[2]	9,591
Champlain[2]	7,321
Central East[2]	6,941
South West[2]	5,789
North East[2]	5,620
South East[2]	5,083
North Simcoe Muskoka[2]	4,762
North West[2]	4,718
Toronto Central[2]	3,549
Waterloo Wellington	2,334
Average for Ontario	**7,394**

1. The province's 856 forensic beds are not included as long-term psychiatric beds. This is because they are used by eligible people regardless of the region where they live (that is, a bed in one region can be used by an eligible person from another region). To be eligible, a person must be referred to the bed by a court.
2. This LHIN has forensic beds in addition to long-term psychiatric beds.

RECOMMENDATION 3

In order to improve access for Ontarians to the mental health services they need as close to their own communities as possible, the Ministry of Health and Long-Term Care and Local Health Integration Networks (LHINs) should:

- determine the number of long-term psychiatric beds needed in each region of the province to meet the demand by Ontarians for these mental health services;
- set a target for the number of long-term psychiatric beds needed in each LHIN, monitor it regularly to ensure it is being achieved; and
- publicly report this information.

MINISTRY RESPONSE

The Ministry will work with LHINs on a capacity planning strategy that incorporates the supply and demand for long-term psychiatric beds in each local community and region. In addition, the Ministry is developing a capacity plan and will work to develop and release a target for long-term psychiatric beds by LHIN. This work will help support the provision of care in the most appropriate setting possible.

While the Ministry agrees that between 2011/12 and 2015/16 there was a net reduction of 134 long-term psychiatric beds across the province, over the same time period there was an increase in short-term (acute) psychiatric beds. Most of these beds were located in general hospitals, which were not looked at as part of this audit.

RESPONSE FROM LHINs

The LHINs agree there is a need to determine the number of long-term psychiatric beds required in each region of the province to meet the demand. Existing mental health capacity planning work conducted in some LHINs can be replicated in other regions to inform decisions on service and capacity requirements. Capacity planning work should also consider the mental health and addictions programs that may be provincially accessed (for example, high-security forensic unit).

4.4 Ineffective Funding Results in Patient Needs Not Being Met

The Ministry decides on the total amount of funding for mental health care in Ontario. In 2015/16, that amount was $3.3 billion.

4.4.1 Funding Not Based on Volume of Demand

Since 2012/13, the Ministry funds ongoing operations at most general hospitals based on the volume of services that they provide. This ensures that hospitals are better able to cope with the growth in demand for the health care services they offer.

Funding for specialty psychiatric hospitals, however, is not tied to the volume of service they provide. Instead, the Ministry provides funding to the hospitals either for ongoing operations or to support specific initiatives. Such initiatives include specialty psychiatric hospitals training other staff who provide direct patient care in remote areas of the province.

The hospitals also receive dedicated program funding from other ministries and the federal government. For instance, in 2015/16, The Royal received about $3 million from the federal department of Veterans Affairs Canada for a program to treat personnel of the Canadian Armed Forces or Royal Canadian Mounted Police who experience persistent psychological difficulty.

The hospitals also generate revenue on their own from sources such as parking and cafeteria sales. **Figure 13** shows total funding special psychiatric hospitals received and generated over the past five years.

Figure 13: Specialty Psychiatric Hospital Total Revenue Breakdown, 2011/12–2015/16 ($ million)

Source of data: Specialty Psychiatric Hospitals

* Other Government Funding is comprised of $2 million provided by the Ministry of Children and Youth Services for community mental health services for youth, $15 million is from the Ministry of Community Safety and Correctional Services to provide mental health services to charged provincial offenders, and $3 million is from the Department of Veteran Affairs Canada to provide mental health services to members of the Royal Canadian Mounted Police or the Canadian Armed Forces.

4.4.2 Limited Funding Increase Impacts Patient Care

For a period of five years, until April 1, 2016, the Ministry's funding for specific initiatives more than doubled (from $61 million to $129 million). However, dedicated Ministry funding for ongoing operations at the hospitals decreased by 2%, or $12 million, from $557 million to $545 million, over the same period.

While the majority of specific initiative funding is not spent on ongoing operations, some of this funding is directed by the Ministry for use to expand an existing program or start a new program. For example, The Royal received over $4 million between 2011/12 and 2015/16 related to the expansion of its forensic unit, including the addition of four beds. This funding can only be used for the specific purpose identified by the Ministry and cannot be used for any other purposes (including for any other ongoing program).

As such, in total, all ministry funding given to specialty psychiatric hospitals for ongoing operations increased by 3%, from $572 million in 2011/12 to $587 million in 2015/16. During this same time period, inflation (based on Statistics Canada's Consumer Price Index) was about 7%. To cope with this limited increase in funding for ongoing operations, the hospitals had to fund a greater portion of their ongoing operations from self-generated revenues, close beds and cut services, which has impacted patient care.

4.4.3 Ministry's Funding Decisions Not Based on Actual Demand

During our audit work, we were informed that for 2016/17, the Ministry provided each specialty psychiatric hospital with a 2% increase in funding, or approximately $12 million, for its ongoing operations. However, this funding increase was primarily based on population growth and the change

in inflation rate and not on actual demand for specialty psychiatric hospital services as indicated by current and projected wait times. It is therefore not clear that a 2% increase is the appropriate amount.

The Ministry also did not do any analysis to verify that each hospital needed the same increase in funding. For example, some hospitals might have longer wait lists and therefore could benefit more from additional funding than other specialty psychiatric hospitals.

It is also not clear that the Ministry is considering the impact on other stakeholders when determining the amount of funding it is providing to each mental health service provider. For example, additional funding to specialty psychiatric hospitals can reduce the number of people going to general emergency departments for mental health reasons. Alternatively, specialty psychiatric hospitals would benefit if the Ministry provides more funding to supportive housing and long-term-care homes that can manage complex patients, to increase the number of beds available. This would enable specialty psychiatric hospitals to discharge patients sooner and open beds to more patients on wait lists.

4.4.4 Ministry Does Not Collect Sufficient Information for Funding Decisions

During our audit, the Ministry created a dedicated mental health and addictions branch. Prior to April 2016, mental health care decisions, such as those related to policy and funding, were decentralized and done within different Ministry branches that also deal with all other provincial health care services, such as general hospitals. While creating a dedicated mental health and addictions branch is a step in the right direction, for this branch to make appropriate decisions it needs information about the demand for mental health services and what services are currently offered.

We found that neither the Ministry nor the LHINs collect information from specialty psychiatric hospitals on what programs they offer, analyze how many patients of each mental illness diagnosis they treat, or collect how long patients must wait to be admitted to a hospital or an out-patient program. Such information is necessary to support good funding decisions.

For instance, the Ministry does not have complete data on the different types of mental health beds across the province. While the Ministry knows the total number of long-term psychiatric beds that exist in the province, it does not know how many of each of these beds exist to treat each mental illness diagnosis. For example, when we asked the Ministry to provide us with the number of beds used to treat addiction patients in the province, the Ministry could only confirm that these types of beds exist in six LHINs. While the Ministry believes that other LHINs have long-term psychiatric beds that treat addiction patients, they currently do not collect enough information from hospitals to determine whether this is true.

4.4.5 LHINs Not Collecting Relevant Information

The Ministry provides funding to each LHIN to allocate to specialty psychiatric hospitals in their specific region. To ensure the funding received by the hospitals is being used appropriately, LHINs should collect and analyze relevant information to assess how well specialty psychiatric hospitals are providing care services that meet the needs of their patients. LHINs have not been doing this.

We found that LHINs use the same template to collect information from specialty psychiatric hospitals as they do from general hospitals. This template asks very little about mental health care that is provided by the hospitals, and is returned back to LHINs mostly blank. For example, the template asks specialty psychiatric hospitals to report the number of surgeries, MRIs and breast screenings to detect cancer that they perform, even though none of these services are offered by them.

As a condition of the funding they receive, specialty psychiatric hospitals enter into accountability agreements with their respective LHIN.

These accountability agreements, however, are not based on any targets related to reducing wait times or improving the quality of care received by hospital patients. Rather, hospitals are only required to admit and treat a certain volume of patients and have a balanced budget. This means that in theory specialty psychiatric hospitals could reach their patient volume target by operating programs that are low cost but have a high patient turnover, while they ignore demand for programs that are more costly but have a lower patient turnover.

RECOMMENDATION 4

In order to deal with the growing wait times for specialty psychiatric hospital service, the Ministry of Health and Long-Term Care and Local Health Integration Networks should as soon as possible address those wait times that are long, as well as develop an overall strategy to reduce wait times, by:

- setting wait time targets for specialty psychiatric hospital services;
- collecting relevant information, such as the number of long-term psychiatric beds that exist for each mental illness diagnosis and wait times, from specialty psychiatric hospitals to determine where additional funding should be allocated; and
- consider tying funding for specialty psychiatric hospitals' ongoing operations to the volume of service that they provide so that they can meet wait time targets.

MINISTRY RESPONSE

The Ministry accepts this recommendation and will identify what linkages between the volume of service and funding could best support timely provision of these services, and, together with LHINs, will work toward developing a strategy to reduce wait times for these services.

The Ministry, in partnership with the LHINs, and using the advice provided by the Mental Health and Addictions Leadership Advisory Council, is working to improve community mental health and addictions services. This will help to ensure that Ontarians receive services early in the course of their illness, which can prevent the need for more intensive and costly hospitalizations and provide better discharge planning for people to access services and supports after discharge from hospital.

Preventing unnecessary hospitalizations will decrease wait times for access to in-patient beds.

RESPONSE FROM LHINs

Appropriate and timely access to mental health and addictions services is a priority for LHINs. Through the annual Ministry-LHIN Accountability Agreement (MLAA) indicator review, the Ministry and LHINs will identify opportunities to improve performance monitoring for mental health and addictions. In turn, the LHIN Service Accountability Agreement (SAA) steering committees and indicator working groups will work to align provincial accountability indicators to local agreements.

Wait times are not only influenced by available beds and services, but also by appropriate patient flow, capacity and supports for transition. For example, creating appropriate capacity for affordable housing and housing supports is necessary for meeting the demands of this population. LHINs will work with the Ministry to identify investments and initiatives that would have the greatest impact on reducing wait times for specialty psychiatric hospital services.

LHINs will also work toward linking targeted services to wait times in the Hospital Service Accountability Agreements (HSAAs) between LHINs and Specialty Psychiatric Hospitals.

4.5 Spending on Direct Patient Care below Comparator Hospitals

With a growing demand for mental health care, it is important that specialty psychiatric hospitals manage health care dollars efficiently so that as much

funding as possible is spent on direct patient care (such as medication and the salary of nurses and other staff who provide direct care to patients).

4.5.1 Spending on Patient Care Declined Slightly

When we reviewed how specialty psychiatric hospitals spent Ministry-provided money for ongoing operations, we found that since 2011/12 spending on direct patient care decreased by 2 cents, from 64 cents to 62 cents in 2015/16, out of every dollar spent. The remaining 38 cents was spent on non-direct patient expenses. This includes expenses not directly related to providing patient care such as salaries for management, supplies and the hospital's information technology systems.

We compared this to the average amount that other comparator hospitals in the province spent on direct patient care. (Comparator hospitals are small community hospitals, which have had fewer than 2,700 acute in-patient or day-surgery cases per year in any two of the prior three years, and chronic-care or rehabilitation hospitals, which are stand-alone hospitals that provide complex continuing care or rehabilitation services.) In doing so, we found that specialty psychiatric hospitals spent about 5%, or 3 cents, less on direct patient care than the comparator hospitals in the province. We also found that while specialty psychiatric hospitals now spend about 2 cents less on direct patient care than they did five years ago, the provincial average of comparator hospitals remained constant. This suggests that overall, specialty psychiatric hospitals may be able to use more of the Ministry funds they receive on direct patient care.

RECOMMENDATION 5

In order to ensure that Ministry of Health and Long-Term Care funding is focused on direct patient care, specialty psychiatric hospitals should identify ways to shift more spending to patient care compared to non-patient care expenses.

RESPONSE FROM HOSPITALS

The specialty psychiatric hospitals accept this recommendation and will conduct a comparative review with hospitals with similar therapeutic roles and settings to explore opportunities to shift more spending toward direct patient care, while recognizing our system's mandate to support the provincial mental health and addictions strategy and a legislative mandate to support the forensic mental health system. In addition, it is important to note that building finance models and IT infrastructure investments to deliver on provincial electronic medical record strategies contribute to overhead costs.

4.6 Differences in How Specialty Psychiatric Hospitals Provide Care

There are differences in policy among the specialty psychiatric hospitals impacting each hospital's criteria for admission, treatment methods and discharge planning.

4.6.1 Lack of Mental Health Standards Leading to Different Care Provided Provincially

Mental health standards help staff make consistent decisions regarding which patients to admit to specialty psychiatric hospitals, what treatment those patients should be provided and how and when those patients should be discharged. Mental health standards can describe what patient diagnosis requires hospitalization or alternatively can be treated through an out-patient program. These standards improve consistency in the care that people with the same diagnosis receive across different hospitals in the same region. While these standards exist in other jurisdictions such as Nova Scotia and the United Kingdom, they do not in Ontario and there is no timetable set to create them.

4.6.2 Hospitals Do Not Agree on Criteria to Admit Patients

In Ontario, each of the four specialty psychiatric hospitals develops its own standards pertaining to patient admission, treatment and discharge. These standards sometimes can differ. This leads to differences in how patients with the same diagnosis are regarded by each hospital.

We spoke with clinical staff at general hospitals that operate near the four specialty psychiatric hospitals who told us that it is common for specialty psychiatric hospitals to reject patients that the general hospitals thought should be admitted there. Staff at one general hospital told us that after this happened multiple times they stopped referring their patients to specialty psychiatric hospitals altogether and now continue to treat them to the best of their abilities. Another general hospital told us of instances when it referred the same patient to two different specialty psychiatric hospitals and the patient met admission standards at one hospital, but was rejected by the other. Mental health standards could reduce the risk of such things happening, as all specialty psychiatric hospitals would use the same publicly identified criteria to admit patients.

Standard Admission Tool Exists But Not Consistently Used

The Level of Care Utilization System (LOCUS) is a standardized tool that can be used by mental health service providers to help determine where a patient should be treated so that they get the care they need. An overall low score for a patient after completing LOCUS indicates there is little supervision of the patient's treatment required and the patient can live independently in the community. A high LOCUS score indicates the patient needs to be admitted into a specialty psychiatric hospital bed to receive more intensive specialized treatment.

The use of this tool helps ensure that only those patients that require hospital care are admitted. This is important, as specialty psychiatric hospitals provide the highest level of specialized psychiatric care, and their resources are limited and in high demand.

Although we noted that this tool has been used in the past, or is being used in some capacity at the hospitals visited, neither of the two hospitals whose patient records were reviewed (CAMH and Ontario Shores) was generally using or requiring this tool to be used by the referral source to help determine whether the hospital was the most appropriate place for the person to receive treatment.

RECOMMENDATION 6

To create consistency in the delivery of mental health services across the province, the Ministry of Health and Long-Term Care should set a timetable for the development of mental health standards. These standards should include:

- clear definitions and guidelines specialty psychiatric hospitals should be required to follow in terms of which patients they admit to their hospitals (such as requiring hospitals to use the Level of Care Utilization System at admission);
- how similar patients should be treated; and
- how and when they should be discharged from the hospital.

MINISTRY RESPONSE

The Ministry supports the provision of additional guidelines to support consistency of care, developed in close partnership with clinicians.

Health Quality Ontario has recently developed three condition-specific mental health standards for the purpose of ensuring high-quality care planning and delivery. These evidence-based standards are based on best practice recommendations for individuals with the following psychiatric needs: adults with a primary diagnosis of schizophrenia (Schizophrenia Quality Standard); adolescents and adults with a primary diagnosis of major depression (Major Depression Quality Standard); and individuals with dementia and the specific behaviours of agitation or aggression (Behavioural Symptoms of Dementia Quality Standard).

All three existing standards outline actions that hospitals can take through interprofessional collaboration to ensure quality and continuity in both care and discharge planning. They also explicitly recommend comprehensive intake assessments (including identification of all risk factors), timelines for consistent review of care plans and guidelines for documentation of all assessment and care plan data to facilitate careful transition between settings upon discharge. The Ministry will examine whether forthcoming mental health standards could potentially reference specialty psychiatric hospital settings more explicitly.

Furthermore, the Ministry looks forward to the recommendations from the Mental Health and Addictions Leadership Advisory Council in 2017 on how to improve system planning, coordination and integration of services.

4.6.3 Admission Assessments Not Always Completed

When admitting patients, staff at each hospital are required to perform a number of assessments to identify treatment needs. For instance, new patients go through a psychosocial assessment to determine their psychiatric history. When we reviewed the assessment process at CAMH and Ontario Shores, we saw that the process was similar at both hospitals. However, when we reviewed a sample of patient files, we found that close to half of the files at Ontario Shores were missing some of the required assessments and almost all of the files were missing some of the admission assessments at CAMH.

This suggests that either the assessments were done but not documented, or were not done. In both cases, this could result in proper care not being provided to a patient.

RECOMMENDATION 7

To ensure that all of a patient's treatment needs are identified and documented, specialty psychiatric hospitals should:

- train staff on the need for admission assessments to be completed for all patients; and
- conduct regular audits of patient files to verify staff are completing these assessments required by hospital policy and take corrective action when this is not occurring.

RESPONSE FROM HOSPITALS

The specialty psychiatric hospitals accept this recommendation and recognize the importance and inclusion of admission assessments in a patient's care plan and are committed to continuing quality best practices in patient care and discharge plans. We will equally ensure that audits are regularly performed for compliance and quality standards in clinical records management, and take corrective action such as providing staff training as necessary.

4.6.4 Care Planning Process at Times Not Documented

The primary concern of hospital staff should be providing direct patient care. However, complete documentation on all aspects of a patient's care while in a hospital is also important in providing quality care to patients.

According to the College of Nurses of Ontario Documentation Practice Standards, "Documentation communicates to all health care providers the plan of care, the assessment, the interventions necessary based on the client's history and the effectiveness of those interventions. It also demonstrates staff's commitment to providing safe, effective and ethical care by showing accountability for professional practice and the care the client receives, and transferring knowledge about the client's health history."

Inadequate documentation regarding a patient's care can lead to patients not receiving optimal care. For example, if hospital staff are not aware of discussions that have been held between other hospital staff members or with the patient, or treatments that have been recommended or provided by other staff members, they might not provide treatment using the most optimal method that the patient prefers.

Each patient who is admitted to a specialty psychiatric hospital is required by the hospital to have a care plan. The Mental Health Commission of Canada describes care plans as a "crucial part of supporting and helping the process of recovery. They should not be distinct from the daily provision of care. They are a key mechanism by which a person's individual care and treatment can be developed, documented and shared with all those who are involved." Both the Ontario Medical Association and Nova Scotia mental health standards also stress their importance.

Care planning involves the patient's care team identifying the patient's needs and risks (such as risk of attempting suicide) and then formulating specific goals of treatment for the patient and what actions need to be taken to achieve those goals into a care plan. All staff working directly with a patient are expected to contribute to the patient's care plan, along with the patient.

We reviewed a sample of patient files at two hospitals (CAMH and Ontario Shores). Based on this review, we identified deficiencies with the three main components of the care plan:

- Identified patient risks are not consistently incorporated into the patient's care plan.
- Care plans did not include necessary patient goals or actions that staff should take to treat the patient, such as recommended activities the patient should participate in or associated timelines for treatment.
- Care plans were not regularly updated to include a patient's treatment status or plans for continued treatment.

While the hospitals had policies regarding the completion of patient care plans, these were not being followed by staff. This could have been due to various factors, including a lack of staff time to both care for patients and complete all required documentation, or the need for staff to have more training on what documentation they are expected to do. We asked the hospitals where we performed patients' file reviews why these items were not occurring, even though they were part of the hospital's policy. The hospitals informed us that as a result of changes to their policies and processes, additional staff training was needed.

Patient Risks Not Always Included in Care Plans

During admission, each hospital is required to do a mandatory assessment of patients. During this assessment, key patient health and behavioural risks are identified. These risks should be documented in a patient's care plan.

In our review of a sample of care plans at the two hospitals we found that the hospitals did not have a formal process in place to ensure that all significant patient risks and needs identified were included in the patient's care plan. We also found that some plans were missing known patient risks. The missing information related to important matters such as, for example, the fact that a patient is at higher risk of choking on their food and needs to be supervised when eating, or concerns of violence for the patient towards self or others.

If such information is not included in a patient's care plan, it can potentially result in patients not receiving proper treatment or in harm to the patient or others.

Some Care Plans Completed Late and Missing Required Information

We reviewed a sample of care plans at Ontario Shores and CAMH and found that the requirements for care planning at each hospital differed. We also found that many plans were completed late or were missing required information. For instance,

while both hospitals require their staff to complete care plans when new patients are admitted, only Ontario Shores requires its staff to update the plan on a monthly basis.

About 40% of the care plans that we reviewed were not prepared at admission as required. More than half of the care plans we reviewed at Ontario Shores were missing patient-identified goals for their hospital stay, or these goals were not identified at the time of the patient's admission. Most of the samples we reviewed at CAMH lacked details on the status of patient goals and what action was taken to accomplish these goals. If there was a valid reason for this omission, such as the patient being unable to understand and communicate their goals, this was not noted.

We noted that standards in another jurisdiction (Nova Scotia) stated the importance of having care plans that include goals and outcomes for an individual along with a timeframe for treatment. However, the care plans we reviewed for patients at the two hospitals did not include any timelines with regards to how long it should take to accomplish the patient's treatment goals. This creates concern that patients might not be receiving care when they should.

Care standards in another jurisdiction, the United Kingdom, note the importance of mental health patients having access to meaningful and culturally appropriate activities and programs during their stay. Activities and programs can range from group therapy sessions, such as behaviour therapy, to mindfulness sessions or singing classes. Activities and programs that improve a patient's physical, cognitive or social skills can all contribute to their treatment and recovery. This jurisdiction's standards identify that these activities and programs should be available seven days a week and in the evenings as well.

Specialty psychiatric hospitals have facilities such as swimming pools, gymnasiums and basketball courts. At the two hospitals we visited and reviewed patient records, we noted that the care plans did not usually include any clear goals for the type or amount of activities and programs that patients should participate in. We looked at the time patients were involved in specific organized activities and programs, which excluded any time spent with psychiatrists (which could be daily or several times per month) and discussions with social workers. From the files reviewed at CAMH, we noted on average that patients were involved in 2.5 activities and programs per week, for a total of less than three hours of activity time for the week. Patients at Ontario Shores participated in an average of five activities and programs per week, but the time spent at these activities was not always documented. While patient participation in programs and activities at specialty psychiatric hospitals is voluntary, staff should be identifying and including appropriate activities into each patient's care plan and encouraging patients to participate in those activities as research indicates that they can contribute to the patient's treatment and recovery.

Care Plans Not Updated; Records Missing of Care Plan Meetings

Those patient files reviewed that had goals in the care plans were not updated on a regular basis. At Ontario Shores, care plans are required to be updated monthly. For the sample of patient goals within care plans that we reviewed, we found that the patient goals went an average of six months without an update, with some goals not updated for more than a year. At CAMH, the patient goals we reviewed went an average of almost four months before an update, with some going without an update for as long as nine months.

We noted that other jurisdictions had standards that stressed the importance of regular, frequent care plan updates. For example, care standards in Nova Scotia require care plans to be revised weekly, or more frequently if required.

Staff meetings allow staff caring for a patient to learn more about the patient's condition and what treatment they have been receiving from other staff involved in the patient's care and to make plans for future patient care. These meetings also

allow staff to discuss and determine what treatment should be provided to ensure the patient's condition can improve and that the patient can be discharged from the specialty psychiatric hospital as quickly as possible.

Out of the two hospitals where we reviewed patient records, only Ontario Shores had a policy that required an initial care planning meeting to occur within three days of a patient's admission and subsequent meetings at least monthly. In a sample of patient records we reviewed at this hospital, we found that in most of the records the occurrence of the initial care planning meeting was either not recorded or when it was, the meeting was held much later than the hospital's policy required. Similarly, about 70% of the files we reviewed did not contain records of all subsequent monthly meetings.

CAMH has no policy that requires staff to hold care planning meetings. Hospital staff told us that in practice staff meet regularly to discuss each patient, for example, once a week or every two weeks, depending on the patient's needs. However, in most of our sampled patient files we found that the records and details of these meetings were missing. We also found that, when the meeting notes were documented, they generally contained very little information on what was discussed.

4.6.5 Discharge Planning Not Being Done at Time of Patient Admission

We reviewed a number of research journals that had studies identifying the importance of early discharge planning. They say that planning for a patient discharge should start as soon as a patient is admitted to a hospital, or very shortly thereafter. This way, there is a better chance that proper care, such as in supportive housing, will be available when the patient is ready to be discharged because the patient can be placed on a wait list sooner. This improves patient flow and ensures hospital resources are used more efficiently on only those patients who are in need of hospital-level care.

In our sample of patient records that we reviewed at Ontario Shores and CAMH, we found that both hospitals required discharge plans to be completed at, just prior to, or within three days, of admission. Our review of patient files at Ontario Shores indicated that discharge plans were completed but they were done late. On average, they were completed two months after a patient was admitted, with some plans not completed until right before the patient's discharge from the hospital. CAMH did not have a formal discharge plan document. Instead, information was scattered throughout the patient's file and we could not always determine when it was recorded or when, or if, a discharge plan was completed.

RECOMMENDATION 8

In order for patients to be given the highest quality of care, specialty psychiatric hospitals should:

- review their care planning policies to confirm they incorporate best practices for patient care planning;
- perform an analysis to determine why staff are not following the hospital's patient care plan and discharge planning policies;
- require staff to determine appropriate programs and activities that will help with each patient's treatment and incorporate these into each patient's care plan. Develop methods to encourage patients to participate in these identified activities; and
- take corrective action so that all aspects of the hospital's care planning and discharge planning policies can be completed by staff. These policies include:
  - adding all identified patient risks in care plans;
  - completing care plans on time;
  - including all critical information in care plans;
  - having regular meetings to update the care plan; and

- performing discharge planning once a patient has been admitted.

The corrective action should be done by management in collaboration with staff to ensure that time spent completing the necessary documentation does not take away from direct patient care.

RESPONSE FROM HOSPITALS

The specialty psychiatric hospitals agree that care planning processes are integral to quality patient care and are continuously working on improving care planning. We are all at different stages of electronic medical record implementation, and these improvements in our data infrastructure have already begun to improve some care planning processes. We will continue to review and improve our care planning policies, and work to ensure our staff understand and comply with these policies, and, as we continue to optimize our clinical practices to improve patient outcomes, we will share best practices across the sector.

Programming for patients is an integral part of the recovery journey. Ensuring that patients have the skills needed to transition back to the community and improve employment and income opportunities is a key priority. All hospitals have programming embedded in their care plans and will continue to strive to improve access and availability of activities, and work to encourage patients to participate in therapeutic activities.

MINISTRY RESPONSE

Health Quality Ontario has recently developed three condition-specific mental health standards for the purpose of ensuring high-quality care planning and delivery. These standards are based on evidence-based best practice recommendations for individuals with various psychiatric needs. All three existing standards outline action hospitals can take through interprofessional collaboration to ensure quality and continuity in both care and discharge planning. In addition, the standards explicitly recommend comprehensive intake assessments (including identification of all risk factors), timelines for consistent review of care plans, and guidelines for documentation of all assessment and care plan data in order to facilitate careful transition between settings upon discharge.

The Ministry will examine whether forthcoming mental health standards could potentially reference specialty psychiatric hospital settings more explicitly.

4.6.6 Hospital Treatment Methods Differ

Specialty psychiatric hospitals treat people with the most complex and severe mental illnesses, and consequently are at the forefront of mental illness treatment and research. A number of the specialty psychiatric hospitals have developed new treatment methods for specific mental illnesses that show improved patient care outcomes compared to other methods. For instance, Ontario Shores developed a new approach to treat certain schizophrenia patients that led to a decrease in the number of patients who were prescribed multiple anti-psychotic medications. Such medications have strong side effects.

We found that there is no process for hospitals to share new treatment methods developed by their peers. Neither are they required by the Ministry to adopt them. This has created a situation where existing treatment methods that could lead to better patient recovery are not available at some hospitals. **Figure 14** lists treatment methods developed by one specialty psychiatric hospital that have not been adopted by the other specialty psychiatric hospitals.

RECOMMENDATION 9

Specialty psychiatric hospitals should continue to develop treatment methods and establish an ongoing forum for sharing them with the

Figure 14: Treatment Methods Developed by Specialty Psychiatric Hospitals That Have Not Been Adopted by Any Other Specialty Psychiatric Hospital

Source of data: Specialty Psychiatric Hospitals

Specialty Psychiatric Hospital	Focus Area of Hospital-Developed Treatment Method
CAMH	• Dementia (focused on reducing aggression in patients) • Schizophrenia* • Youth psychotic disorders (including youth showing early signs of psychosis) • Mood disorder (bipolar depression)
Ontario Shores	• Schizophrenia* • Dealing with metabolic side effects of antipsychotic medication • Major depression in in-patients • Dementia with agitation and aggression in in-patients
The Royal	• Youth and mood disorders (focused on reducing the time patients are waiting to obtain treatment for these illnesses) • Substance abuse with any other mental illness

* Ontario Shore's treatment method is focused on the assessment and treatment of adults (18–64 years old) with schizophrenia and schizoaffective disorder in their in-patient and out-patient settings. CAMH's treatment method is focused on specific age groups (such as schizophrenia patients aged 60 years or older).

other specialty psychiatric hospitals and with other general hospitals who also provide mental health services.

RESPONSE FROM HOSPITALS

The specialty psychiatric hospitals accept the recommendation to continue improving standards in mental health across Ontario. Over the last few years, the four hospitals created the Mental Health and Addictions Quality Initiative, which has grown to 20 hospitals and has garnered interest from other provinces and internationally. The initiative includes a publicly reported quality scorecard and forum to share best practices. The four hospitals have also focused on the development of integrated care pathways in a number of areas to improve standardization. All have participated in the development of the recently launched three Health Quality Ontario quality standards in schizophrenia, dementia and major depression. We will continue to support the development of standards for mental health and addiction treatment and care, and look for opportunities to share this work outside of the specialty psychiatric hospital sector.

4.7 Lack of Ministry Oversight and Information May Be Hindering Improved Mental Health Patient Care

4.7.1 Ministry Has Not Set Sufficient Targets for Mental Health Services

The specialty psychiatric hospitals have publicly released (since 2011) a Mental Health and Addictions Quality Initiative scorecard that identifies critical performance indicators on mental health as determined by the specialty psychiatric hospitals. **Appendix 2** identifies the type of information these hospitals report in their scorecard. While this information has been publicly released for the past five years, neither the Ministry nor the LHINs have evaluated this information or set targets for the hospitals against the information they report.

While the Ministry has set targets focused on improving access to services at general hospitals, such targets do not exist for specialty psychiatric hospitals.

Only Two LHIN Targets Set by Ministry Related to Mental Health

The Ministry has only two targets directly related to mental health. The targets are meant to be used to assess access and availability of community services for mental health conditions and substance abuse in each LHIN. While the Ministry did not set a time frame for each LHIN to achieve the targets, the LHINs are expected to demonstrate progress in achieving each target. They are:

1. Out of all emergency department visits in a LHIN, only 16.3% or fewer visits should be repeat unscheduled emergency department visits within 30 days by patients with mental health conditions.
2. Out of all emergency department visits in a LHIN, only 22.4% or fewer visits should be repeat unscheduled emergency department visits within 30 days by patients with substance abuse conditions.

The Ministry monitors repeat emergency department visits by those with mental illness or substance abuse issues, as it believes access to effective community services for mental health and substance abuse conditions should help to reduce the number of repeat unscheduled emergency visits.

4.7.2 Repeat Visits to Emergency Rooms Increased

When we looked at how all the LHINs performed against the two targets, we found that over the past five years, repeat visits to emergency departments within 30 days for mental illness or substance abuse conditions increased.

Overall, emergency room usage for mental health reasons increased 21% (from 209,250 visits to 254,161 visits over the last five years), while Ontario's population grew by only 4% during the same period.

As a percentage of all emergency department visits, between 2011/12 and 2015/16:

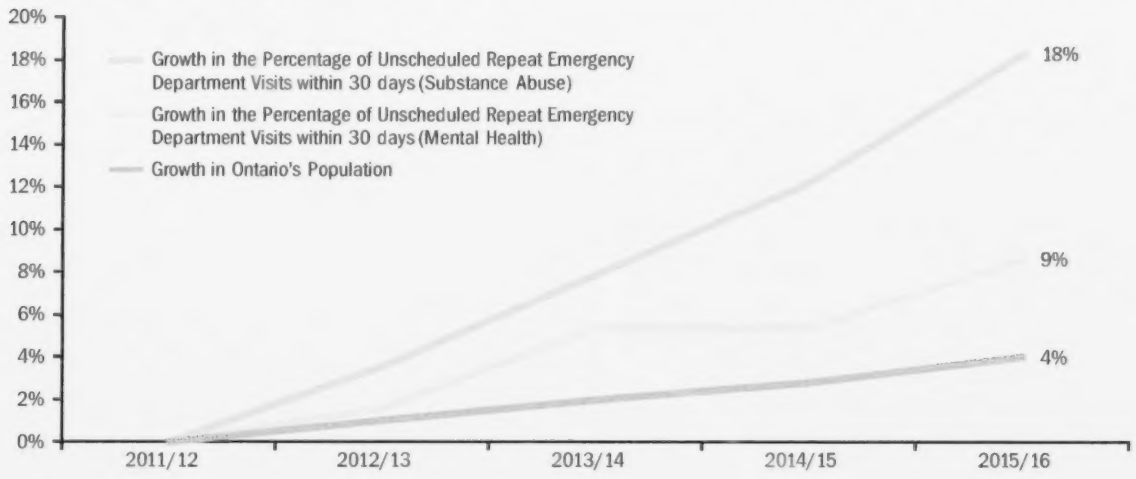
- repeat visits for substance abuse rose 18%; and
- repeat visits for mental illness rose 9% . (See **Figure 15**).

When we reviewed the percentage of repeat visits for mental health and substance abuse conditions compared to all emergency department visits separately for each LHIN, we found that:

- the percentage of emergency department visits that were repeat visits by patients with a mental health condition grew in 12 out of the 14 LHINs between 2011/12 and 2015/16;

Figure 15: Growth in the Percentage of Unscheduled Repeat Emergency Department Visits within 30 Days for Mental Health and Substance Abuse Conditions Compared with Growth in Ontario's Population, 2011/12–2015/16

Source of data: Ministry of Health and Long-Term Care



- in 2011/12, there were five LHINs that met the province's 16.3% target, there were no LHINs that met this target in 2015/16 (see **Figure 16**);
- the percentage of emergency department visits that were repeat visits by patients with a substance abuse condition grew in 12 out of the 14 LINHs; and
- in 2011/12, there were five LHINs that met the province's 22.4% target, in 2015/16 there was only one LHIN that met this target (see **Figure 17**).

We asked the LHINs that oversee specialty psychiatric hospitals why the percentage of unscheduled repeat emergency department visits for mental health and substance abuse conditions in their respective LHIN increased between 2011/12 and 2015/16. A common reason raised by the LHINs was that the overall increase in emergency department visits during the same time period for mental health conditions was 21%.

4.7.3 Ministry Does Not Know Reason for Increased Demand

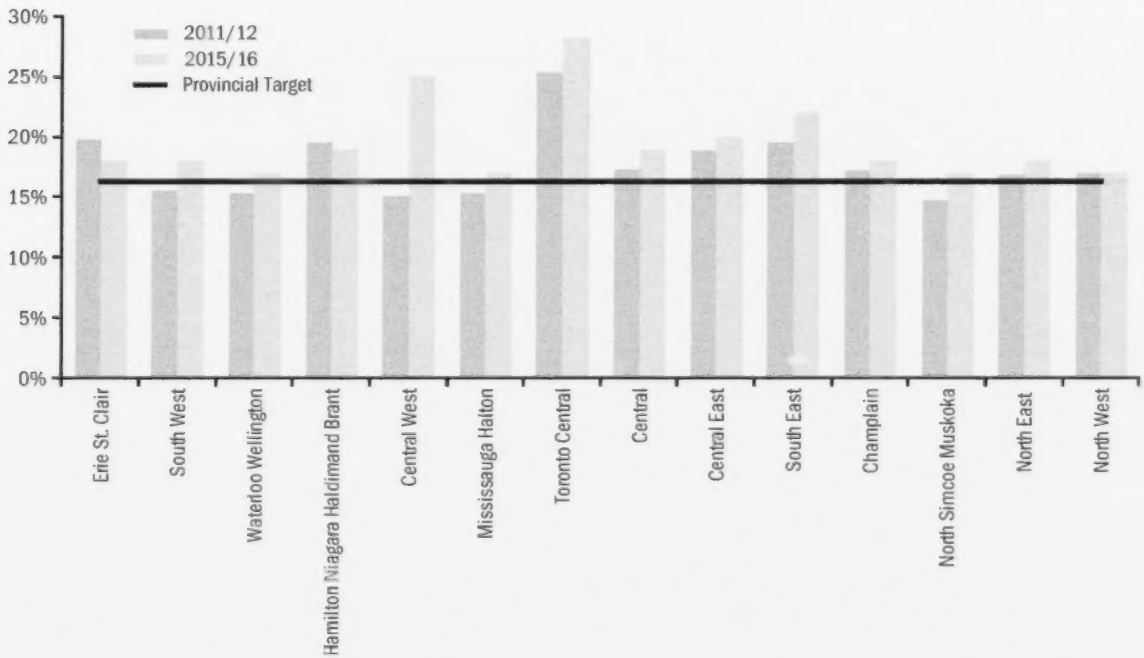
We asked the Ministry if it had conducted any analysis to determine why emergency department visits for mental health reasons had increased. It had not. Without performing this analysis, LHINs lack direction over how to reduce repeat emergency department visits in their regions.

Some of the LHINS informed the Ministry in writing that these targets were not useful as, alone, they did not provide enough information for LHINs to determine what changes they should make in their region to reduce emergency department visits.

For example, these targets give no indication whether specialty psychiatric hospitals should be

Figure 16: Percentages of Total Emergency Department Visits for Mental Health Conditions That Were Unscheduled Repeat Visits, by LHIN, 2011/12 and 2015/16

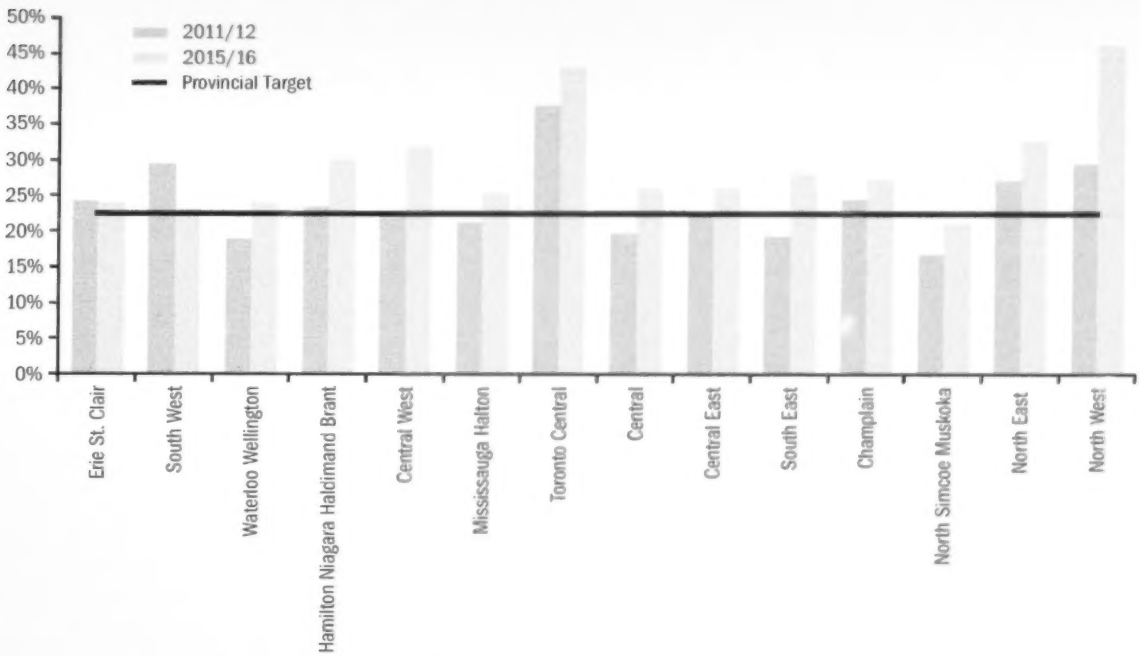
Source of data: Ministry of Health and Long-Term Care



Note: The black line represents the 2015/16 provincial target (no more than 16.3% of all emergency department visits for mental health conditions should be repeat unscheduled visits within 30 days of visiting an emergency department for a mental health condition).

Figure 17: Percentages of Total Emergency Department Visits for Substance Abuse Conditions That Were Unscheduled Repeat Visits, by LHIN, 2011/12 and 2015/16

Source of data: Ministry of Health and Long-Term Care



Note: The black line represents the 2015/16 provincial target (no more than 22.4% of all emergency department visits for substance abuse conditions should be repeat unscheduled visits within 30 days of visiting an emergency department for a substance abuse condition).

providing more care to reduce repeat emergency department visits for mental health conditions. The LHINs requested that the Ministry revisit the usage of these two targets and identify alternative measures that would better reflect access and availability of mental health services in their communities.

RECOMMENDATION 10

To better understand how accessible, available and effective mental health services are provincially, including specialty psychiatric hospital services, the Ministry of Health and Long-Term Care should:

- perform an analysis to determine why emergency department visits for mental health treatment have increased provincially; and
- conduct a review and adopt better indicators and targets for assessing mental health, such as those used by specialty psychiatric hospitals in their Mental Health and Addictions Quality Initiative scorecard.

MINISTRY RESPONSE

In 2017, the Mental Health and Addictions Leadership Advisory Council will be making recommendations to the Ministry as to how to improve system planning, co-ordination and integration. A Data and Performance Measurement Task Group was struck by the Council to carry out this work. Members of the Task Group include experts in health systems data and performance measurement, experts in health and

public policy, and leaders from mental health and addictions community agencies and hospitals. The Task Group has developed a list of 10 indicators that the Ministry will consider as part of a more comprehensive data strategy, which will enable the assessment of accessibility, availability and effectiveness of mental health services.

4.8 Not Enough Mental Health Emergency Departments

The increase in number of repeat visits to emergency rooms within 30 days could be partially attributed to the lack of specialty mental health care emergency services.

CAMH has the only emergency department in Ontario that is exclusively for those experiencing mental health issues. This emergency department was first established in the 1960s. Although Ontario's population has doubled since then, no additional emergency departments currently exist elsewhere in the province.

Since 2011, visits to this emergency department have gone up by 40%, from 6,604 visits in 2011/12 to 9,252 visits in 2015/16. On average, patients must now wait an extra three hours, or about 40% longer, from 7.8 hours in 2011/12 to 10.8 hours in 2015/16 to be admitted into a bed at CAMH than they did five years ago.

4.8.1 Regular Emergency Rooms Not Best Alternative

Those who are not able to get to CAMH can seek immediate help at a regular emergency department. However, regular emergency departments indicated that they are not best suited to care for people with mental illness or addictions:

- Patients experiencing mental health or addiction issues have worse experiences when in chaotic environments, like loud and crowded emergency departments.
- Staff are generally less experienced at identifying mental illness.
- General emergency rooms are not set up the same way as a specialized mental health waiting room (bolted down chairs, security present) to ensure the waiting room is a safe environment for patients and others waiting for treatment.
- Patients cannot be transferred directly to a specialty psychiatric hospital and are forced to wait longer in facilities less able to meet their needs.

Police sometimes bring individuals with mental illness or addictions to the nearest emergency department. There, they must wait with the person until they are assessed by a doctor. In 2015, this took on average 80 minutes per visit. That is almost twice as long as when police brought an individual to CAMH's emergency department. The cost of the extra time police had to wait with an individual at regular emergency departments compared to at CAMH in 2015 was almost $400,000. The extra time spent waiting also took time away from regular police duties.

While there are many benefits to dedicated mental health emergency rooms, including providing a safer experience to patients and allowing patients to directly obtain access to specialty psychiatric hospital beds, the Ministry has no plans to create additional ones across the province.

RECOMMENDATION 11

To allow people with mental health and addiction issues to access the care they need as quickly as possible, the Ministry of Health and Long-Term Care should conduct a review to determine whether there is benefit in creating additional dedicated mental health emergency departments within general or specialty psychiatric hospitals. These departments would allow patients to be treated in a safe manner and be able to be transferred directly from the emergency department to long-term psychiatric beds at specialty psychiatric hospitals when needed.

MINISTRY RESPONSE

The Ministry accepts this recommendation and will work with the LHINs and health service providers to develop appropriate solutions for improving the emergency services system for people with mental health and addictions issues, including appropriate spaces in emergency departments.

The Ministry is working to improve access to appropriate care for patients who use the emergency services system and require mental health services. Emergency departments are one component of a comprehensive emergency services system in Ontario that includes other components, such as EMS, CritiCall Ontario, Ornge, nursing stations and telemedicine. This emergency system already includes elements specifically tailored to mental health needs, including crisis response, assertive community treatment teams (ACTT), HealthLinks and other community providers.

CritiCall Ontario provides 24-hour-a-day emergency referral service for physicians across Ontario, facilitating advice (consultation) and effecting decisions (patient referral) for emergent, urgent and critically ill patients. In December 2015, CritiCall Ontario launched the provincial Adult Mental Health & Addiction Resource Board and accompanying Provincial Mental Health & Addiction Dashboard. The Resource Board and Provincial Dashboard provide up-to-date information about the number of available in-patient mental health and addiction beds in all Ontario hospitals that have mental health and addiction programs, including specialty psychiatric hospitals. For the first time, the Ministry, LHINs and hospitals have access to real-time data on the availability of mental health and addiction beds to improve access, patient flow and bed utilization. In addition, the Child and Adolescent Mental Health & Addiction Resource Board was launched in March 2016.

4.9 Lack of Patient Information Sharing

Patients with mental illness or addictions do not rely solely on specialty psychiatric hospitals for care. For example, patients in out-patient programs at the hospitals might also receive mental health services from community mental health agencies. It is also possible that during a patient's stay at a hospital, police might need to be called upon to intervene if a patient has assaulted another patient or staff member or if a patient has left without authorization from the hospital. It is therefore important that specialty psychiatric hospitals and other mental health stakeholders share information with each other that will allow patients to receive the best care in a safe manner.

4.9.1 LHINs Need to Have and Share Information Database for Patient Care

The Ministry has not ensured that the same level of co-ordination and information sharing exists throughout the province between the different mental health stakeholders. We noted that only one LHIN (Toronto Central) has a database whereby all providers of mental health services can look up patients' information to identify all the care and services that patients are receiving. This ensures patients receive the care that they require and prevents duplication of care.

4.9.2 Limited Information Sharing Increases Risks to Patients and Police

A similar problem exists with the sharing of patients' information with the police. For instance, some patients at specialty psychiatric hospitals are at risk for suicide or can become aggressive toward others. If these patients leave the hospital without authorization, they could pose a significant risk to themselves or to the public. In those cases, the police should be immediately notified when this does happen. Police informed us that this is not always the

case. Indeed, there have been times when they were not notified for up to six hours after a patient left the hospital without authorization or did not return to the hospital at a predetermined time.

Police also told us that some hospitals are not willing to share patient information, citing patient confidentiality requirements. Without this information, the police have to assume patients pose a high risk of danger to the public, which can lead to a more excessive use of force. We noted that the Ottawa Police Services had entered into a memorandum of understanding with the Ottawa Hospital, which is a general hospital. As part of this agreement, there were clear rules to govern information sharing between both parties to ensure patient privacy was protected while allowing both parties to do their jobs safely and effectively. While a similar memorandum of understanding exists between CAMH and the Toronto Police Service, the feedback we heard from police indicates that CAMH, as well as the other specialty psychiatric hospitals, can make improvements to the amount of information they share with local police departments.

RECOMMENDATION 12

To improve the way in which mental health stakeholders across the province share information, the Ministry of Health and Long-Term Care should:

- work with Local Health Integration Networks (LHINs) and set a timetable for the sharing of information in each LHIN so that regional mental health service providers can share what services they provide to patients with each other;
- work with LHINs and specialty psychiatric hospitals to develop processes for hospitals to share information across LHINs (to other mental health service providers and hospitals) for the benefit of patients and service providers; and
- develop protocols for hospitals to share information with police to ensure police can obtain the information they need to do their job while protecting patient privacy.

MINISTRY RESPONSE

The Ministry will continue to work with LHINs to facilitate information sharing across the specialty psychiatric hospitals and LHINs.

The Ontario Common Assessment of Need (OCAN) mental health assessment tool has been implemented in 200 community agencies. Assessment information can, with patient consent, be uploaded into the Integrated Assessment Record (IAR), which also houses in-patient mental health, long-term care and Community Care Access Centre (CCAC) assessment information. Through the IAR, providers can access the same patient's information across various services. The Ministry is presently considering whether to mandate the use of the OCAN in all Ministry-funded community mental health agencies.

The Ministry will examine ways to improve information sharing with police. One opportunity is to build on the development of a Model Framework for location transitions protocols between police services and hospitals. The Framework was developed in partnership with the Ministry of Community Safety and Correctional Services (MCSCS), the Provincial Human Services and Justice Coordinating Committee (PHSJCC) and the Canadian Mental Health Association–Ontario Division. Once the Framework is launched publicly, a set of tools will also be released to assist with the development of police-hospital transition protocols, including information sharing where permissible under existing legislation, in Ontario communities.

RESPONSE FROM LHINs

The sharing and spread of effective practices across LHINs and health service providers is a

positive recommendation. Existing pan-LHIN groups could be leveraged for sharing information and consulting on policies, including the CEOs Council, Senior Directors Council and Provincial MHA Advisory Committee.

The LHINs already use information sharing systems, such as the Community Care Information Management System (CCIM), which enables information sharing between a patient's providers.

4.10 Staff Seek Improved Safety

As well as improving safety protocols when patients interact with police, improvements are needed in regard to staff's feelings of safety while working within the province's specialty psychiatric hospitals.

4.10.1 Staff Safety Concerns Not Resolved in a Timely Manner

Working directly with patients with the most severe and complex forms of mental illness, some of whom have no control over their behaviour and can cause physical harm to themselves or to others, can pose challenges for staff working at specialty psychiatric hospitals. That is why it is important for a hospital's management to take all the necessary steps to create a safe environment for staff and patients.

During our audit, we reviewed the results of staff surveys conducted at each hospital since 2014. In the latest survey results, almost 60% of 1,715 staff who responded from the four hospitals indicated that management is not taking effective action in response to reported safety incidents. This includes preventable incidents such as a nurse being burned after a patient got access to hot water, and a patient exiting a locked room without authorization through a poorly constructed door.

When we reviewed the hospitals' policies dealing with addressing reported incidents, we found that the hospitals do not require management to communicate with their staff about what actions they take to prevent all reported safety and security incidents from occurring again.

RECOMMENDATION 13

To help ensure that staff feel safe while at work, specialty psychiatric hospitals should:

- update their policies to require management to keep staff regularly informed on what changes they are making to improve security and staff safety so that reported security incidents do not occur again; and
- continue to survey staff on their satisfaction with management's response to reported safety incidents and take corrective action when staff satisfaction remains low.

RESPONSE FROM HOSPITALS

The specialty psychiatric hospitals accept this recommendation and are committed to safe and healthy workplaces. A number of initiatives are already in place to enhance staff safety such as personal safety devices, training and regular risk assessments. We are currently working on enhancements like introducing Safewards as part of an intensive Safe & Well initiative. The hospitals will continue to explore other opportunities to enhance safety and will collaborate with their respective Joint Health and Safety Committees to improve staff safety. We regularly survey staff through bi-annual employee opinion surveys that encompass a variety of areas, including safety, and will continue to prioritize the survey feedback, including safety-related results, and action them accordingly. We will ensure communication processes are in place to inform staff of changes made to improve security and staff safety.

MINISTRY RESPONSE

The Ministry prioritizes patient and staff safety.

In August 2015, in partnership with the Ministry of Labour, the Ministry established a Workplace Violence Prevention in Health Care Leadership Table to better protect health-care professionals on the job. The Leadership Table consists of representatives from front-line

stakeholders, patient advocates and experts, as well as senior executives from both ministries and the health sector.

The Leadership Table will provide advice on how to reduce and prevent workplace violence for health-care professionals. To start, the Leadership Table focused on how to prevent violence against nurses in hospitals, followed by preventing violence against all hospital workers and in the broader health-care sector.

Based on the advice of the Leadership Table, an implementation plan will be developed to:

- make hospitals safer;
- reduce incidents of workplace violence in hospitals and the broader health-care sector;
- change attitudes toward workplace violence; and
- improve workplace safety culture regarding violence.

4.10.2 Waypoint's New Forensic Building Less Safe for Staff

While management's lack of response to safety concerns brought forward by hospital staff was an issue at all specialty psychiatric hospitals, one hospital, Waypoint, stood out as more significant from this group.

Waypoint has the only high-security forensic program in Ontario. This program has 160 beds to treat forensic patients who are deemed the highest risk of harming themselves or others. Patients are either referred to this program directly from court, or from forensic programs in other hospitals, because those forensic programs are not able to treat the patient in a way that maintains the safety of that patient, other patients and staff.

In May 2014, Waypoint relocated its forensic patients, including those being treated in their high-security forensic program, into a newly constructed building. The new building, constructed through a public-private-partnership arrangement delivered by Infrastructure Ontario at a cost of $474 million, was supposed to offer a safe environment for both staff and patients.

Since the move, 90 deficiencies impacting staff and patient safety were identified. These deficiencies (including a poorly constructed fence and a broken electronic door-closing mechanism) contributed to more than 470 reported safety hazards (related to staff assaults, property damage, vandalism and a patient climbing over a fence and leaving without authorization) during the first year after relocation. This is almost triple the amount of safety hazards reported in the year prior to the relocation.

Results of a hospital survey conducted about half a year after the move showed that 85% of 108 staff surveyed who worked in the new building felt "not at all safer" compared to when they worked in the old building.

Between May 2014 and April 2016, the Ministry of Labour issued 12 compliance orders to address safety issues that occurred in the new building. Seven of these orders were related to two incidents that involved staff being assaulted or injured, including one incident where a staff member was stabbed by a patient. Although in year two after the relocation reported safety hazards have declined, they still are more than double the amount that was reported in the year prior to the relocation.

RECOMMENDATION 14

To help ensure that staff can feel safer in the new forensic building, the Waypoint Centre for Mental Health Care (Waypoint), in collaboration with staff, should:

- address all design deficiencies impacting staff and patient safety in a formal action plan with set target dates for completion of each deficiency;
- communicate this plan to staff; and
- regularly update staff on deficiencies that have been resolved.

WAYPOINT RESPONSE

Waypoint agrees that staff should feel safe and has prioritized, tracked and developed plans to ensure the Atrium Building is safe as part of its

corporate strategic plan, with 90% of the deficiency items on the tracking report addressed as of October 2016. Staff survey results indicate that overall staff perception of safety one year after the relocation exceeded levels in the old building. The hospital will continue to include staff in addressing design concerns, and track and communicate resolution. The hospital in conjunction with its Joint Health & Safety Committee has agreed to undertake a third external risk assessment that will inform future actions and plans in regard to staff safety, and will be communicated to staff.

4.11 Staffing Not Based on the Level Needed for Best Patient Care

To provide proper care, hospitals need to have the right number of nurses, psychiatrists and other staff who directly work with patients. We found that between 2011/12 and 2015/16, the number of staff across all four hospitals who provide care to admitted patients remained mostly unchanged. At The Royal, staffing decreased by 5%, and at Waypoint by 2%. The number of staff increased at CAMH and Ontario Shores by 5%. While over this same period of time the four hospitals closed 32 beds, the overall change in staffing at the four hospitals was fairly minimal, which resulted in their combined staff to patient ratio remaining about the same at two staff to three patients.

4.11.1 Not Enough Staff for Activities

While the overall staff to patient ratio remained about the same, staff and patient survey results from the four hospitals indicate that there is not enough staff in some programs. In surveys conducted at each specialty psychiatric hospital since 2014, half of the 3,361 staff surveyed indicated that they do not have enough time to do their job, and almost two-thirds of the 594 patients who responded to a question regarding organized activities (like group therapy) during the weekends indicated that there were not enough. We reviewed a sample of patient files at CAMH and Ontario Shores that indicated that only 20% of patients at the former hospital and 40% of patients at the latter hospital participated in activities over the weekend. While the overall staff to patient ratio remained mostly unchanged at the specialty psychiatric hospitals between 2011/12 and 2015/16, the hospitals do not have target staff to patient ratios, making it unclear if current staffing levels across the hospitals are appropriate.

4.11.2 Fewer Staff Are Full-Time

We also saw that over the past five years hospitals shifted towards hiring more part-time staff and that the mix of full-time and part-time staff varies between the hospitals.

Although part-time staff can provide equally valuable care, we came across a number of studies in research journals that found that a greater usage of full-time staff over part-time staffing results in better care for the patients with mental health issues because the patients get to build a longer-term therapeutic relationship with their full-time care providers.

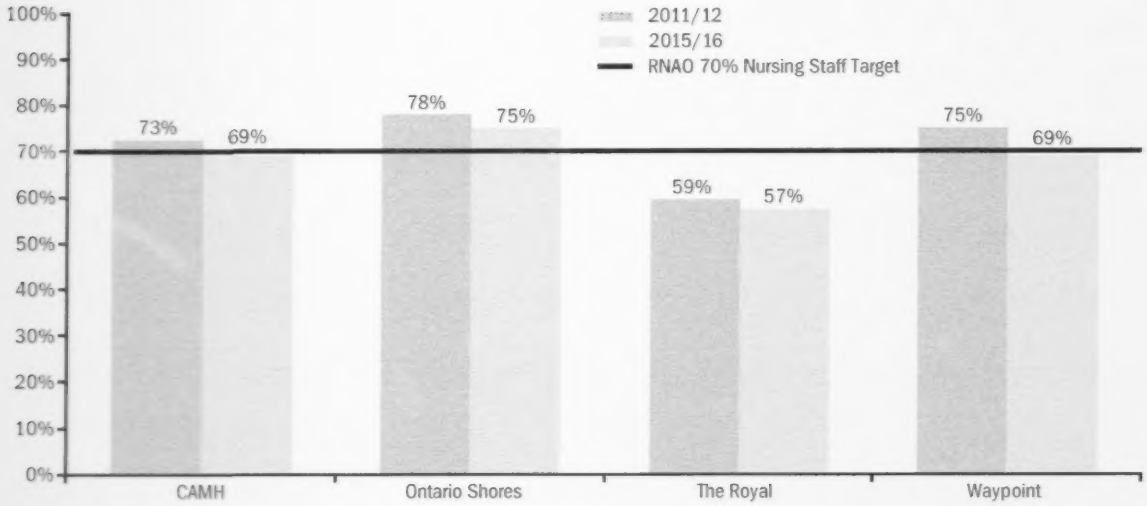
The Registered Nurses Association of Ontario (RNAO) has for the past few years consistently recommended that 70% of all nursing staff should be full-time to achieve best-quality care results. Three specialty psychiatric hospitals employed more than 70% of their staff that provide care to in-patients on a full-time basis in 2011/12. Five years later, one of the hospitals was above this ratio, and all had fewer full-time staff as a percentage of overall staff than they did five years earlier.

Figure 18 shows the change in full-time staffing levels at specialty psychiatric hospitals in 2011/12 and 2015/16.

Specialty psychiatric hospitals do not have staffing targets for their program units. This makes it difficult to determine whether hospitals have the most effective full-time to part-time staff composition.

Figure 18: Percentage of In-Patient Direct Care Staff that Are Full-Time, by Specialty Psychiatric Hospital, 2011/12 and 2015/16

Source of data: Specialty Psychiatric Hospitals



RECOMMENDATION 15

To help ensure that hospital staffing is at a level that allows for patients to receive the highest quality care, specialty psychiatric hospitals should:

- review best-practice literature to develop guidelines, where relevant, for staff-to-patient ratios and full-time to part-time staffing compositions for all hospital programs; and
- use this information when making hospital program staffing decisions.

RESPONSE FROM HOSPITALS

The hospitals accept this recommendation and will continue to track useful program staffing information consistent with the Ontario Hospital Reporting Standards. We also commit to undertake a best-practice literature review about staffing in specialty psychiatric hospitals to check against current practices and support transparent decision-making to meet patient care needs. We will use this information for the guideline development where relevant for staff-to-patient ratios and full-time to part-time staffing compositions.

The specialty psychiatric hospitals are also committed to the highest quality care, as well as benchmarking, as evidenced in the Mental Health and Addiction Quality Initiative. Staffing in a specialized mental health facility requires clinicians with the best skill set to work with people with severe and treatment-resistant mental illness. During the past years, we have witnessed significant increases in acuity in individuals with complex mental illness. As a result, there have been changes to address patients' clinical needs, as well as provide for a safe and therapeutic milieu for patients and staff.

Appendix 1: Specialty Psychiatric Hospital In-Patient Wait Times, 2015/16[1]

Source of data: Specialty Psychiatric Hospitals

	Wait Time (Days)[2]
Ontario Shores	
Treatment for forensic patients' reintegration into the community in a secure setting	268
Youth specialized eating disorder program	105
Adults suffering from mental illness and a developmental disability	68
Geriatric patients with dementia	32
Geriatric patients with severe or complex mental health needs	27
Adults aged 18 to 35 suffering from mental illness and substance abuse	17
Adult specialized neuropsychiatry program	15
Adults with serious and persistent mental illness, including ones who are treatment resistant	14
Youth general mental illness	13
Assessment of diagnosis and stabilization of mental health symptoms for adults	12
General program for forensic patients in a secure setting	6
Assessment of forensic patients required by courts	1
Assessment of forensic patients required by courts and treatment for patients' reintegration into the community in a secure setting	1
General program for forensic patients	0
The Royal	
Adults requiring recovery-based treatment due to prolonged illness and long hospitalizations	80
Adults suffering from mental illness and substance abuse	43
Adults with mood and anxiety disorders	6
Adults with schizophrenia	6
Geriatric patients with severe or complex mental health needs	4
28-day adult addiction treatment program	2
Crisis unit for outpatients requiring urgent care	1
Youth general mental illness	1
Treatment unit located at Ottawa site for forensic patients	0
Treatment unit located at Brockville site for forensic patients	0
Waypoint	
Adults suffering from mental illness and substance abuse	85
General program for forensic patients	48
Adults suffering from mental illness and developmental disability	18
Adults with severe and persistent mental illness receiving psychosocial rehabilitation	12
Geriatric patients with signs and symptoms of a psychiatric disorder or adult patients with Alzheimer's	11
High-security program for forensic patients suffering from mental illness and developmental disability	6
Assessment of forensic patients required by courts	5
Short-term assessment of diagnosis and rapid stabilization of mental health symptoms	5 hours
Secure program for forensic patients	0
High-security program for forensic patients diagnosed with mental illness and/or substance abuse	0

1. CAMH does not centrally collect or track in-patient wait times. 70% of CAMH in-patient admissions are directly from its emergency department. The wait time information is not fully comparable between hospitals. The Royal's wait time tracks how many days from the date a psychiatrist determines a patient should be admitted into the hospital to the date of the in patient's admission. Ontario Shores and Waypoint begins tracking their wait times from the date that the patient's referral was received.
2. The hospitals measure median wait times of programs. Therefore, half of the people admitted waited longer than the days listed below.

Appendix 2: Mental Health and Addictions Quality Initiative Scorecard Indicators

Source of data: Specialty Psychiatric Hospitals

Performance Indicator Category	Description	2011/12–2015/16 Trend by Specialty Psychiatric Hospital			
		CAMH	**Ontario Shores**	**The Royal**	**Waypoint**
Patient Complexity	Three indicators that measure the percentage of patients seen by the hospitals that have more than one psychiatric diagnosis, or both a medical and psychiatric diagnosis.	Increase in the complexity of mental health of patients treated (the percentage of patients admitted with more than one mental health condition grew from 62% to 70%).	Increase in the complexity of mental health of patients treated (the percentage of patients admitted with more than one mental health condition grew from 56% to 89%).	Decrease in the complexity of mental health of patients treated (the percentage of patients admitted with more than one mental health condition decreased from 59% to 44%).	increase in the complexity of mental health of patients treated (the percentage of patients admitted with more than one mental health condition grew from 37% to 55%).
Patient Outcomes	Five indicators: three measure improvement in a patient's condition between admission and discharge, and two measure the readmission rates for patients within 30 days of discharge from the hospitals.	Decrease in the ability of patients who were discharged from the hospital to care for their mental illness independently (the percentage of patients who were able to do this more successfully upon hospital discharge decreased from 67% to 56%).	Decrease in the ability of patients who were discharged from the hospital to care for their mental illness independently (the percentage of patients who were able to do this more successfully upon hospital discharge decreased from 59% to 41%).	Increase in the ability of patients who were discharged from the hospital to care for their mental illness independently (the percentage of patients who were able to do this more successfully upon hospital discharge increased from 35% to 66%).	Decrease in the ability of patients who were discharged from the hospital to care for their mental illness independently (the percentage of patients who were able to do this more successfully upon hospital discharge decreased from 65% to 62%).
Patient Safety	Three indicators: one measures the percentage of patients who leave the hospital without authorization; one measures the percentage of patients whose medications are reviewed at admission (which reduces the risk of a patient being given improper medication during their hospital stay); and one measures what percentage of patients did not need to be restrained during their admission to the hospital.	Decrease in the percentage of patients who have had their medication reviewed at admission (from 92% to 88%).	Increase in the percentage of patients who have had their medication reviewed at admission (from 91% to 99%).	Increase in the percentage of patients who have had their medication reviewed at admission (from 58% to 100%).	Increase in the percentage of patients who have had their medication reviewed at admission (from 76% to 93%).

Performance Indicator Category	Description	2011/12–2015/16 Trend by Specialty Psychiatric Hospital			
		CAMH	**Ontario Shores**	**The Royal**	**Waypoint**
Patient Access*	One indicator that measures what percentage of all the patients at the hospital should be discharged from the hospital but cannot due to the lack of long-term nursing home beds or supportive housing.	Increase in patients who no longer need hospital care but cannot be discharged (from 13% of all patients at the hospital to 18%).	Increase in patients who no longer need hospital care but cannot be discharged (from 14% of all patients at the hospital to 17%).	Decrease in patients who no longer need hospital care but cannot be discharged (from 8% of all patients at the hospital to 7%).	Increase in patients who no longer need hospital care but cannot be discharged (from 5% of all patients at the hospital to 7%).
Staff Safety	One indicator that measures staff time away from work due to injury.	Decrease in the number of Workplace Safety and Insurance Board claims per 100 employees (from 2.1 to 1.7).	Decrease in the number of Workplace Safety and Insurance Board claims per 100 employees (from 5.9 to 5.0).	Decrease in the number of Workplace Safety and Insurance Board claims per 100 employees (from 2.0 to 1.1).	Decrease in the number of Workplace Safety and Insurance Board claims per 100 employees (from 3.3 to 1.8).
Staff Absenteeism	One indicator that measures staff sick-time.	Decrease in percentage of staff time for sick leave (from 2.8% to 2.0%).	Decrease in percentage of staff time for sick leave (from 5.7% to 5.5%).	No change in percentage of staff time for sick leave (remained constant at 3.2%).	Increase in percentage of staff time for sick leave (from 4.5% to 5.7%).
Financial	One indicator that is the percentage of budgets in the last five years that were balanced.	All budgets were balanced.	All budgets were balanced.	All budgets were balanced.	All budgets were balanced except for 2013/14 ($664,000 deficit).

* The Patient Access indicator reported in the Mental Health and Addictions Quality Indicator Scorecard for CAMH and The Royal is different than the percentages reported in **Figure 10** of this report, which were calculated by our Office. The percentages calculated by The Royal and CAMH do not include complete information. For the Scorecard, The Royal excludes patients in the Forensic Treatment Unit in its Brockville location from its calculation. In **Figure 10**, we identified The Royal's percentages as 7.1% in 2011/12 and 2.5% in 2015/16. Due to data quality issues, CAMH's calculation of this percentage in 2011/12 as 13% was inaccurate and not comparable to the results it reported in subsequent years. CAMH agrees that the proper percentage of these patients was 17.1% in 2011/12, which matches what we report in **Figure 10**.

Chapter 3
Section
3.13

Supply Chain Ontario and Procurement Practices

1.0 Summary

The process of procuring goods and services by the Government of Ontario is intended to be open, fair and transparent. The Government spends an average of $3.5 billion annually on procuring goods and services. (This does not include spending on the construction of capital assets, such as highways and buildings.)

The individual government ministries across the Province independently make decisions on what goods and services they require. The Treasury Board Secretariat (Secretariat) is responsible for updating and maintaining the rules and best practices for procurements that are laid out in the Ontario Public Service Procurement Directive (Directive). The ministries are required to follow these procurement requirements.

According to these requirements, ministries must first source goods and services from arrangements of preferred suppliers. These suppliers have been selected through a competitive process by Supply Chain Ontario (SCO) to ensure that the ministries are receiving the best price for quality goods and services. The ministries select preferred suppliers to bid on their procurement contracts, and the winning supplier(s) provides the goods, services or consultants. For some goods and services, such as office supplies and courier services, SCO selects a single preferred supplier for all the ministries to use in order to get the lowest price through bulk purchasing.

The largest preferred supplier arrangement is IT Consulting Services. This service allocates, based on need, either internal IT staff or external IT consultants to ministries. It is managed by the Secretariat. The ministries make a request to the Secretariat for their IT staffing, which the Secretariat first tries to fill with internal employees. If none are available, it will help ministries find external IT consultants with the required expertise.

Overall, we found that ministries are following the procurement requirements and that procurement of goods and services is mostly competitive, fair and cost-effective. For example, based on our testing we found that most ministries properly planned and acquired their procurements competitively. In addition, ministries mostly received goods and services at the contract price. However, we did find examples where the procurement requirements were not followed. Non-compliance can increase ministries' risk of not receiving value for money from awarded contracts. We also noted that the government is not taking full advantage of bulk buying opportunities and may be forgoing associated price discounts. In addition, we noted that a shortage of internal IT staff is resulting in an

overreliance on more costly external IT consultants. We further noted some weaknesses in how ministries procure IT consultants that leave the process vulnerable to fraud.

Some of our specific findings are as follows:

- **Supply Chain Ontario (SCO) manages preferred supplier arrangements effectively.** We found that preferred supplier arrangement files were complete, awards were justifiable and the process was fair and done competitively according to the procurement requirements.
- **SCO lacks information to identify bulk buying opportunities.** SCO does not have ready access to ministries' procurement information because there is no centralized electronic database. For example, it can tell whether a supplier received a payment of $500,000, but does not know if the payment is for one contract or 10 contracts, the duration of the contract, or what good or service was purchased. Without this information, SCO cannot proactively identify new bulk buying opportunities that could potentially reduce future costs.
- **A shortage of internal IT staff has led to an overreliance on costly consultants.** Over the past two years, the ministries' approximately 3,200 requests for IT staff have been filled about 90% of the time by external consultants. The Secretariat, which oversees IT staffing, estimates that a consultant costs $40,000 more annually than a permanent employee. Part of the extra costs of using consultants is the middleman fee paid by the ministries to the preferred supplier for placing a consultant.
- **Best practices over the procurement of IT consultants are not always followed.** We found weaknesses in how ministries procure IT consultants. Consultants are hired without in-person interviews, payments to consultants can be authorized by the same person who hires them, and the Secretariat that processes these payments does not perform any additional review to ensure payments are legitimate. Because of these control weaknesses, the risk exists that the ministries may not always be selecting the most qualified candidate. For example, a senior manager at a ministry created and hired a phantom consultant. Over a period of several months, the senior manager approved the phantom consultant's invoices and pocketed $150,000 for himself. The Secretariat has still not implemented internal controls to prevent this situation from recurring.
- **The new online procurement system is not widely used due to design concerns.** In 2014, SCO implemented a new online procurement system intended to make the bid process more efficient and paperless. It was designed to conduct tenders online. However, concerns with the system, such as limiting the number of characters in data fields where suppliers input their bids, impact the bidding process. As a result, suppliers continue to submit paper bids that are assessed manually. In 2015/16 only about 146, or 32%, of 458 total tenders were conducted using the system. About 100 of the 146 were for complex tenders. Bids for another 145 complex tenders were still handled in paper form and reviewed manually. SCO intends to make use of the system mandatory by January 2017.
- **Suppliers are charged higher fees under the new online procurement system.** New system user fees charged to suppliers are two-and-a-half times higher than those charged before the new system was implemented. The increase in fees has raised the concern that small businesses could be discouraged from bidding on government contracts.

This report contains 12 recommendations with 20 action items to address our audit findings.

MINISTRIES AND SECRETARIAT RESPONSE

The Ministry of Government and Consumer Services (MGCS) and Treasury Board Secretariat (TBS) are in agreement with the recommendations made in this report.

We recognize the importance of ensuring that public sector procurement processes uphold the principles of fairness, openness and transparency. We agree that non-compliance with these principles can increase the risk of not achieving value for money.

Efforts by both MGCS and TBS will continue to focus on making Ontario's procurement processes more efficient and effective. We are committed to driving cost savings by enhancing bulk buying opportunities and ensuring the cost effective use of consultant services. We will continue to promote electronic tendering as a way to remove barriers for suppliers while ensuring the system design meets the highest of standards and remains open, fair and transparent to all suppliers.

We would like to acknowledge the efforts of the Auditor General and her staff in conducting this audit. The recommendations will support MGCS and TBS in ensuring that ministries can deliver the highest quality services to Ontarians by getting the right products, at the right time, in the right place, and in accordance with our policies and processes.

2.0 Background

2.1 Procurement Process

The Government of Ontario's ministries spend on average about $3.5 billion annually on a variety of goods and services such as consulting services, courier services, office supplies and furniture and wireless devices.

The procurement process has been designed for ministries to receive the best value for money when buying goods or services in a way that is fair and transparent for both the ministries and suppliers. As shown in **Figure 1**, the procurement process used by ministries involves six stages.

2.1.1 Procurement Requirements

The Ontario Public Service Procurement Directive (Directive) lays out the requirements, responsibilities and best practices that all government ministries must follow when making their procurements. Throughout this report we refer to the contents of the Directive as procurement requirements.

Figure 1: The Procurement Process
Prepared by the Office of the Auditor General of Ontario

Planning
Identifying needs, developing a business case (where required) and obtaining required approvals
Sourcing
Determining what goods and services are available and from whom, and the appropriate ways to procure them
Selection
Agreement (e.g., purchase order or contract) signed between the appropriate ministry staff and supplier for agreed-upon terms, including deliverables and pricing
Receipt of Goods or Services
Ensuring deliverables are received and payments are made in accordance with agreement and that any issues are dealt with in a timely manner
Post Receipt of Goods or Services
Evaluating deliverables, outcomes and supplier performance
Documentation Retention and Corporate Reporting
All documentation related to the procurement must be retained

The core principles of the procurement requirements are:

- Value for money—ministries should procure goods and services only after they have considered their needs, alternatives and timing.
- Supplier access—suppliers must be treated equally and fairly, and have open access to compete for government business.
- Management oversight—procurement should be responsibly managed through the right systems, policies and processes.

The Treasury Board Secretariat (Secretariat) is responsible for developing and updating the procurement requirements. Deputy Ministers are responsible for ensuring that their ministries follow the procurement requirements. Deputy Ministers are also responsible for establishing the systems, policies and procedures within their ministries that are necessary to achieve this.

Supply Chain Ontario (SCO) is responsible for ensuring that the Ontario Government receives the best value when procuring goods and services. SCO is a division of Ontario Shared Services within the Ministry of Government and Consumer Services (MGCS). SCO's main responsibilities are to:

- create and manage arrangements with preferred suppliers;
- provide expert advice to ministries on procurements; and
- manage the Ontario Tenders Portal—online procurement system that ministries use to post their needs for goods and services and then receive and evaluate bids.

2.2 Procurement Steps

According to the procurement requirements, when ministry staff need to procure goods or services they first must check whether they can address their need using available internal resources, either within the ministry or across government. **Appendix 1** lists these resources and the ministries that provide them.

If goods or services cannot be obtained this way, then a ministry's next step is to determine whether required goods and services can be procured from preferred suppliers. Depending on the dollar value of the goods or services required, ministries must obtain quotes from a minimum number of preferred suppliers. For many common goods and services, such as courier services and office supplies, SCO has arrangements with a single preferred supplier that the ministries have to use.

If preferred suppliers do not offer what a ministry needs, then the ministry can proceed with buying goods or services on the open market. As shown in **Figure 2**, there are four steps in the procurement process.

2.3 Procurement Methods

The procurement requirements outline the methods that ministries must use to procure goods and services, including:

- A ***preferred supplier arrangement*** is established centrally by SCO through a competitive process that authorizes one or more qualified supplier(s) to provide goods or services routinely required by government to all ministries for a defined period of time, with specific terms and conditions, including pricing. Ministries must use preferred supplier arrangements if available.
- The ***invitational competitive*** method is when a ministry invites a select number of suppliers to bid on an opportunity.
- The ***open competitive*** method is when all suppliers in the market can bid to provide goods or services.
- The ***non-competitive*** method is used under specific circumstances, such as when procurements need to be done urgently, or relate to public safety issues or confidential matters. In such circumstances, ministries can bypass some rules and procure directly from their chosen specific supplier.

Figure 2: Overview of Steps in the Procurement Process
Prepared by the Office of the Auditor General of Ontario

Step 1
Check availability of internal resources within the ministries
Yes, if available
Arrange Internally
No, if not available
Step 2
Check availability of internal resources across government (see Appendix 1)
Yes, if available
Arrange with Supplier Ministry
No, if not available
Step 3
Check if procurement can be made from a preferred supplier either through a tender with multiple preferred suppliers bidding or from a single preferred supplier pre-selected by SCO (see Appendix 2)
Yes, if it can
Arrange with Preferred Supplier
No, if it cannot
Step 4
Procure in the open market

Different rules apply to procurement of goods versus consulting services. These rules are very specific. Generally, the procurement rules ministries must follow depend on the value of the procurement and if it is made through an arrangement with preferred suppliers or in the open market.

2.4 Preferred Supplier Arrangements

The purpose of setting up arrangements with preferred suppliers is to save ministries time, effort and the cost of negotiating their own separate arrangements with each supplier. The arrangements are also intended to provide the ministries across the government with discounts on the goods and services due to their large volume of purchases. SCO is responsible for setting up arrangements with preferred suppliers, and managing and renewing the contracts.

As of September 2016, SCO had 62 arrangements for certain types of goods and services, with 1,082 potential preferred suppliers. We list the arrangements and the number of suppliers in **Appendix 2**. Within these 62 arrangements there are three consulting arrangements for 686 suppliers, and 59 arrangements for 396 suppliers.

Arrangements with preferred suppliers have already been established competitively by SCO. As a result, the ministries are able to limit the number of preferred suppliers they select to bid on goods or services.

As a way to reduce costs through bulk purchasing, some arrangements, such as for courier services and office supplies, are made with only one supplier. SCO awards a contract to one supplier that is capable of supplying the goods or services across all ministries, usually for a period of three to five years. As previously mentioned, ministries must use this supplier. When this contract expires, SCO goes back to the open market to then establish a new contract arrangement.

Consulting arrangements such as the one for IT Consulting Services are made with many preferred suppliers (for example, IT consulting, with 291 suppliers). These suppliers then compete for contracts tendered by the ministries.

3.0 Audit Objective and Scope

Our audit objective was to assess whether the government's process for procuring goods and services is open, fair and transparent. We examined whether:

- goods and services were acquired by ministries in accordance with mandated policies contained within the Ontario Public Service Procurement Directive; and
- Supply Chain Ontario (SCO) has effective systems, information and procedures in place to establish cost-effective preferred supplier arrangements and to support ministries in obtaining the best value for their procurement spending.

Senior management at SCO reviewed and agreed with our objective and associated criteria.

Excluded from the scope of our audit are procurements of goods and services related to the construction of infrastructure capital assets. See **Chapter 3.10** of this Annual Report for our audit of the awarding of transportation infrastructure capital assets construction contracts at the Ministry of Transportation.

To find out whether ministries are following the Ontario Public Service Procurement Directive (Directive), we used financial information from the government's financial accounting system to analyze the government's 2014/15 expenditures. We then selected the following 10 ministries:

- Ministry of the Attorney General;
- Ministry of Community Safety and Correctional Services;
- Ministry of Education;
- Ministry of the Environment and Climate Change;
- Ministry of Finance;
- Ministry of Government and Consumer Services;
- Ministry of Health and Long-Term Care;
- Ministry of Natural Resources and Forestry;
- Ministry of Tourism, Culture and Sport; and
- Treasury Board Secretariat.

The Government of Ontario does not maintain procurement information centrally in electronic format. Such information exists at different ministries, sometimes only in paper format at different locations scattered across the Province, where the procurement originated.

For each ministry, we then reviewed a sample of payments related to different categories of goods and services. Our sample size was derived based on the relative amount that each ministry spent in 2014/15. For each of the samples, each ministry then provided us with pertinent procurement documentation. We reviewed this documentation to assess ministries' compliance with the Ontario Public Service Procurement Directive.

We also spoke with staff involved in the procurement process at each of these ministries. Each of these ministries also completed our questionnaire about preferred supplier arrangements and SCO's procurement advisory services.

We interviewed key personnel at the Treasury Board Secretariat (Secretariat) who are responsible for updating the Directive and who manage the government's IT Consulting Services preferred supplier arrangement. As well, we reviewed a sample of IT consulting procurements to assess whether they were conducted in accordance with the Directive.

We researched how procurement is done by other comparable provincial governments and the federal government, and spoke with staff at the Treasury Board Secretariat (TBS) Quebec and Public Services and Procurement Canada/Government of Canada about the way they manage their procurement process.

In planning our audit, we also reviewed reports published by Internal Audit at the Ministry of Government and Consumer Services and the Ministry of the Attorney General.

4.0 Detailed Audit Observations

4.1 Ministries Are Mostly Following Procurement Requirements

Overall, we found that ministries follow the procurement requirements. Procurement of goods and services in our sample was mostly competitive, fair and cost-effective. For example, most ministries properly planned and acquired the procurement competitively. In addition, ministries mostly received the goods and services at their contracted price. However, we did find some examples where the procurement requirements were not followed fully. Non-compliance with procurement requirements increases ministries' risk of not receiving value for money on awarded contracts.

Specifically, we found situations where:

- certain ministries did not accurately estimate the quantity or value of goods and services that they needed and therefore used an incorrect procurement method;
- certain invitational procurements were not as competitive as required;
- certain non-competitive procurements should have been handled in a competitive manner;
- ministries paid for goods or services prior to the receipt of these goods or services; and
- bid evaluation documents could not be located.

We also consistently saw that ministries were not completing suppliers' performance evaluations after the receipt of goods or services. The Province does not have a supplier performance rating database for ministries to track suppliers' poor past performance so that this information can be factored into future supplier selection decisions.

4.1.1 Ministries Are Compliant with Procurement Methods Although Estimating the Value of Goods and Services Can Be Improved

The procurement requirements state that goods at or greater than $25,000 and services at or greater than $100,000 must be procured through an open competitive process, meaning that all interested suppliers in the open market can bid on the opportunity. For procurements below these values, ministries can limit the number of bidders.

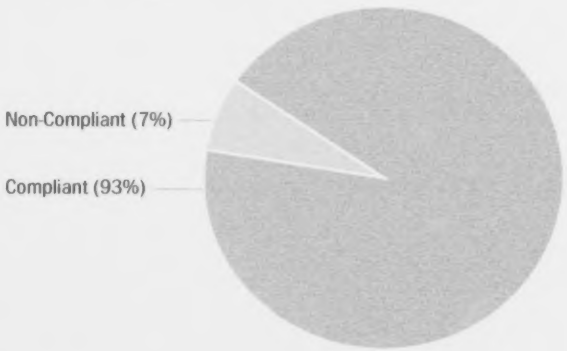
When ministries procure goods or services, they first need to plan the procurement by deciding what goods or services they need, estimate the value of these goods or services and then obtain required internal approvals to proceed with the procurement. Failure to properly estimate the value of the procurement can result in the ministry following the wrong procurement method. Estimating the wrong quantity can result in procuring an insufficient amount of goods or services and later being forced to procure these goods non-competitively.

As shown in **Figure 3**, we found that in over 90% of samples that we reviewed, ministries properly planned their procurements.

However, we did find that ministries need to do a better job at estimating the costs of their required goods and services to ensure that they select the procurement method that can achieve the most

Figure 3: Ministries' Compliance with Procurement Method

Prepared by the Office of the Auditor General of Ontario



value for money. Some examples where this was not done are as follows:

- The cost of services was estimated to be $80,000, which allowed the ministry to limit the number of bidders. The ministry received only one bid of $115,000. If the estimate had been set at $100,000 or higher, the ministry would have been required to procure the services through an open competitive process and may have obtained better value for money.
- The ministry's estimate was $77,000, but the lowest received bid was almost twice that amount at $149,000. Once again, if the estimate was $100,000 or higher this procurement would have been done through an open competitive process.
- The ministry competitively awarded a contract to a consultant for $112,000. One month later, and before the contract was signed, the ministry increased the scope of this procurement by $63,000 to $175,000. If the ministry had done a better job at estimating the full scope of the consulting assignment it could have procured all services at once, potentially at a lower total price.
- The ministry competitively procured several parts for specialized equipment from a supplier for $92,000. Before signing a contract with the winning bidder, the ministry realized it needed to procure more parts. As a result, it signed a contract with the winning supplier for $226,000, therefore procuring the additional parts non-competitively.
- The ministry increased an original contract worth $2.9 million to purchase up to 600 specialized devices and associated yearly maintenance fees to $4.7 million and 939 devices without proper justification or documentation.
- The ministry twice extended a consulting contract, from $84,000 to $144,000 and then to $167,000, without sufficient levels of approvals.

RECOMMENDATION 1

In order to ensure that the correct procurement policy is followed and value for money is obtained on all procurements, ministries should take more care in estimating the costs of their required goods or services to ensure that they use the correct procurement method.

MINISTRIES AND SECRETARIAT RESPONSE

On behalf of the ministries, the Ministry of Government and Consumer Services (MGCS) agrees with this recommendation and will establish a reference group comprised of Chief Administrative Officers (CAO Reference Group) drawn from across government, to identify opportunities to enhance compliance with procurement policy. We will also leverage existing forums, including the Procurement Community of Practice, to guide ministries towards available training, tools and templates and to seek their input regarding additional requirements needed to support more effective procurement planning and estimating contract values.

4.1.2 Ministries Are Generally Complying with Invitational Procurement Requirements

Ministries can limit the number of bidders when they procure from preferred suppliers, depending on the dollar value of the procurement. **Figure 4** shows procurement requirements for procuring from preferred suppliers.

As shown in **Figure 5**, we found that in over 95% of samples we reviewed, the ministries followed the procurement requirements and invited the correct number of preferred suppliers.

However, we did find examples where the value of the procurement warranted a more competitive approach. The exceptions we found included:

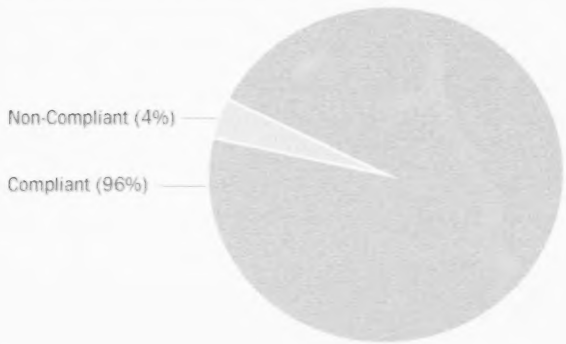
Figure 4: Invitational Procurement Requirements

Prepared by the Office of the Auditor General of Ontario based on the Ontario Public Service Procurement Directive

Procurement Value	Procurement Requirements
Less than $25,000	Ministries may invite one or more preferred supplier(s).
$25,000 up to but not including $250,000	Ministries must invite three or more preferred suppliers.
$250,000 up to but not including $600,000	Ministries must invite five or more preferred suppliers.
$600,000 or greater	Ministries must invite all preferred suppliers that offer the good or service.

Figure 5: Ministries' Compliance with Invitational Procurement Requirements

Prepared by the Office of the Auditor General of Ontario



- For two procurements valued at more than $600,000 each, the ministry in one case invited only seven preferred suppliers, and in the other only five. For these two procurements it received one and two bids respectively. In both cases, in accordance with procurement requirements, the ministry should have allowed all preferred suppliers that offer this good or service to bid on these opportunities.
- For a procurement valued at $500,000, the ministry invited only three preferred suppliers to bid, instead of inviting the required minimum of five suppliers. Only one bid was received.

By not opening these procurement opportunities to the appropriate number of suppliers, these ministries limited the competitiveness of these procurements and might not have received value for money.

RECOMMENDATION 2

In order to ensure that value for money is obtained on all invitational procurements, the ministries should ensure that the required number of preferred suppliers are given the opportunity to bid on providing the required goods or services.

MINISTRIES AND SECRETARIAT RESPONSE

On behalf of the ministries, the Ministry of Government and Consumer Services (MGCS) agrees with this recommendation and will utilize the CAO Reference Group, noted in the response to Recommendation 1, as well as existing forums to identify opportunities to enhance compliance with procurement policy. We will also ensure that, when communicating the availability of new and renewed preferred supplier agreements to the ministries, that ministries are reminded of their policy requirements.

4.1.3 Ministries Are Generally Compliant with Non-Competitive Procurement Requirements

Ministries have an obligation to ensure that taxpayers receive good value from purchasing decisions the ministries make. A competitive procurement process helps to achieve this because it can give a ministry a range of options when choosing the supplier that provides the highest quality goods or services at the lowest price. When a ministry

Figure 6: Conditions for Non-Competitive Procurements

Prepared by the Office of the Auditor General of Ontario based on the Ontario Public Service Procurement Directive

Most Common Conditions When Ministries Can Procure Goods or Services Non-Competitively
• There is an urgency and the ministry does not have the time to conduct a competitive procurement.
• The goods or services are related to a confidential matter.
• Using a competitive process could interfere with the government's maintenance of security or order.
• Only one supplier is qualified to meet the ministry's requirements due to compatibility issues or exclusive rights.
• A competitive procurement was conducted but the ministry did not receive any qualified bids.

buys from just one pre-selected supplier without that supplier competing to provide the goods or services, the ministry cannot be certain that it is achieving the best value for money.

However, there are conditions where the procurement requirements allow ministries to procure non-competitively from a single supplier. The most common ones are listed in **Figure 6**. When ministries procure non-competitively they must justify their decision and document their reasons for using a non-competitive process.

In our sample, we noted only a small number of non-competitive procurements. Overall, these were well documented and met the allowable conditions shown in **Figure 6**. However, we noted some exceptions. For example, a ministry did not justify or document two non-competitive procurements, one to purchase approximately $100,000 worth of video and audio editing services and another worth about $800,000 to design, assemble and print a report.

RECOMMENDATION 3

In order to ensure that the use of non-competitive procurement is defendable if questioned, the reasons for its use should be adequately documented.

MINISTRIES AND SECRETARIAT RESPONSE

On behalf of the ministries, the Ministry of Government and Consumer Services (MGCS) agrees with this recommendation and will utilize the CAO Reference Group, noted in the response to Recommendation 1, as well as existing forums to identify opportunities to enhance compliance with procurement policy. In addition, MGCS will develop a strategy to promote its training program to ministries that emphasizes requirements around non-competitive procurement and promotes procurement best practices and related tools.

4.1.4 Ministries Are Generally Compliant with Contract Payment Terms

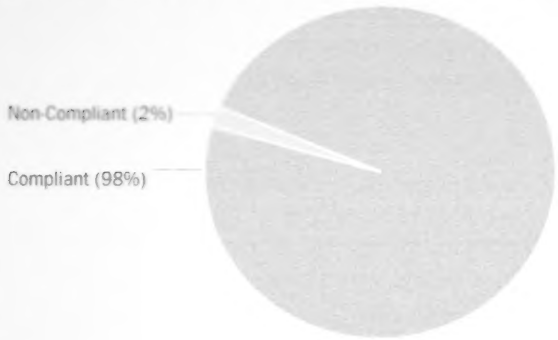
Contracts that ministries sign with suppliers contain terms that describe when and what goods or services must be provided and when ministries are required to pay for these goods or services. The procurement requirements state that ministries must follow payment terms contained in their contracts with suppliers. These terms usually require ministries to pay suppliers only after goods are delivered or services rendered.

As shown in **Figure 7**, we found that in almost all of the samples we reviewed, ministries followed the payment terms stated in their contracts.

However, we noted a few exceptions:

- A ministry in one case paid a supplier upfront the full contract amount of $400,000. This payment was made just one day after this contract was signed. In another case with the same supplier, the ministry paid $90,000 before services were provided and earlier than required. The total value of the contract in this case was also $400,000. The ministry

Figure 7: Ministries' Compliance with Contract Payment Terms
Prepared by the Office of the Auditor General of Ontario



also paid another supplier the full contracted amount of $300,000, just six weeks into a 12-month contract, once again paying much earlier than required.

- A ministry paid $66,000 earlier than it had to and before services were provided. The payment was made just one week after a $200,000 contract was signed.
- In another ministry, we found a case where the procurement cost was overestimated and the ministry paid more than it had to. This procurement was estimated to cost $159,000. However, the winning bid was only $132,000. Without any changes to the winning bid, the ministry awarded a contract for $159,000 to the supplier and paid $28,000 that it did not need to.

RECOMMENDATION 4

In order to ensure that the procured goods are received as expected and services are rendered, payments should only be made in accordance with contract terms, which usually require payment after the goods are received or services rendered.

MINISTRIES AND SECRETARIAT RESPONSE

On behalf of the ministries, the Ministry of Government and Consumer Services (MGCS) agrees that this is an area that warrants ongoing attention. MGCS and Treasury Board Secretariat (TBS) are collaborating on a project designed to improve both the government's financial system and associated business processes, policies and practices—including practices around payments made to businesses contracted to provide goods and services to ministries.

Implementation of improvements as a result of these initiatives will result in increased system and business process controls and maximize the use of purchase orders and automated process workflow. We will work with ministries to implement these changes and provide tools that ensure payments are made in accordance with contract terms.

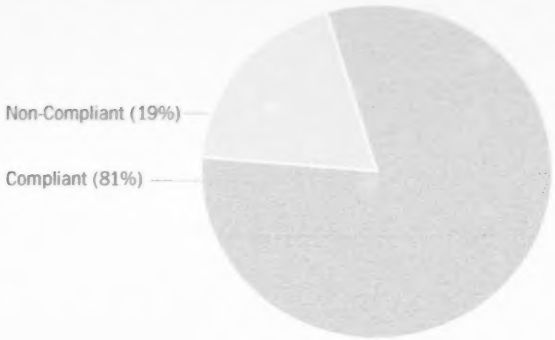
MGCS will also continue to provide ongoing learning and training to ministries to reinforce best practices and address any identified knowledge or skill gaps.

4.1.5 Ministries Can Improve Their Compliance with Procurement Documentation Requirements

The procurement requirements state that ministries must document all their procurement-related decisions. Procurement documentation should be both sufficiently detailed and easy to comprehend to demonstrate that the ministry conducted the procurement according to the procurement requirements and that the contract was awarded to a supplier that best meets the terms and conditions of the assignment.

As shown in **Figure 8**, although we found that in over 80% of samples we reviewed, documentation was sufficient for us to determine that the procurement was done according to procurement requirements and the contract was awarded to

Figure 8: Ministries' Compliance with Procurement Documentation Requirements
Prepared by the Office of the Auditor General of Ontario



the best supplier, this was not the case in almost 20% of our samples. Most of these exceptions were procurements of consulting services. They included five procurements worth between $160,000 and $960,000. Without proper documentation, we were unable to determine whether these contracts were awarded to the best-value consultants.

RECOMMENDATION 5

In order to ensure that there is evidence to defend, if questioned, that contracts are awarded to winning suppliers, ministries should ensure that all documentation related to procurements is completed and retained.

MINISTRIES AND SECRETARIAT RESPONSE

Records management is a responsibility of all Ontario Public Service (OPS) staff and one that the government takes seriously. Records management training is available to all OPS staff. The Ministry of Government and Consumer Services will develop a strategy to further promote this training program to ministries and will work with the CAO Reference Group, as noted in the response to Recommendation 1, to enhance compliance with procurement policy.

4.1.6 Supplier Performance Not Tracked

A supplier's past performance can provide an indication of potential future performance. The procurement requirements state that ministries must evaluate and document a supplier's performance following the completion of the contract. In our review, we found that none of the ministries sampled were following this procurement requirement.

Developing a framework and information system to support this is important so that lessons learned can be leveraged to make better future procurement decisions.

RECOMMENDATION 6

In order to ensure that ministries receive highest quality goods and services, ministries should:

- ensure that performance evaluations are completed for each supplier;
- develop and implement a fair and transparent process for considering past supplier performance when making new procurement decisions; and
- assess ways in which this information can be stored centrally in electronic form.

MINISTRIES AND SECRETARIAT RESPONSE

On behalf of the ministries, the Ministry of Government and Consumer Services (MGCS) agrees that supplier performance management is an important part of contract management and successful procurement outcomes.

MGCS and Treasury Board Secretariat agree with this recommendation and are developing a new model to collect and utilize supplier performance management information for Information Technology consulting services. This new model will be piloted in select ministries and will be assessed for more broad application across the OPS. MGCS will also research and assess procurement models that incorporate past supplier performance scores into future procurements.

4.2 Supply Chain Ontario Manages Preferred Supplier Arrangements Appropriately—Opportunity for More Arrangements

4.2.1 Preferred Supplier Arrangements Procured Fairly, Openly and Competitively

SCO is responsible for creating and managing arrangements with preferred suppliers. The purpose of these arrangements is to save ministries the time, effort and cost of procuring on their own in the open market and to provide discounts through bulk buying opportunities. For example, SCO informed us that when it renewed preferred supplier arrangements for office supplies and copy paper, the government realized an average price discount of about 80% and 60% respectively compared to market price.

Arrangements with preferred suppliers are usually made for three to five years. During this time suppliers agree to sell to ministries goods or services at set prices and quality. When these arrangements expire, SCO renews them. SCO can also create new arrangements when it identifies new bulk buying opportunities. To ensure that the government obtains the best value, arrangements with preferred suppliers are renewed or created through an open competitive procurement process.

We selected a sample of arrangements that SCO renewed between 2012 and 2015. Our sample included arrangements for things such as consulting services, courier services, shredding services, groceries and office products. We reviewed whether these arrangements were established according to the procurement requirements in a fair and open manner and gave equal access to all potential suppliers.

We also reviewed bid evaluation documents to determine how SCO selected the winning supplier. Based on our review, we found that preferred supplier arrangement files were complete, awards were justifiable, and the process was fair and done competitively according to the procurement requirements.

4.2.2 Bulk Buying Opportunities Not Fully Realized

We estimated that in 2015/16 ministries spent about $3.5 billion on goods and services. This large amount of spending creates bulk buying opportunities and associated price discounts. For the government to take advantage of discounts, SCO needs to know what and how ministries procure. Using this information it could then identify new bulk buying opportunities to create additional preferred supplier arrangements.

SCO does not have direct access to ministries' procurement information. As discussed previously, ministries do not store such information centrally. Rather, it exists at each ministry, sometimes only in paper format, at different locations scattered across the Province, where the procurement originated.

The only information stored centrally that SCO can access is in the government's financial accounting system. However, the government's financial accounting system only contains information about the amount paid by a ministry to a supplier over a specific time period and the type of category the payment relates to.

For example, from the government's financial accounting system, SCO can tell whether a supplier received payment of $500,000, but not whether this payment relates to one contract or 10 contracts, the duration of the contract, what specific good was purchased or service provided, the quantity of that good or service, and if the supplier is a preferred supplier.

Because of this, SCO has not been able to proactively identify new bulk buying opportunities that may generate additional price discounts for the Province. Instead, its primary focus is on renewing existing arrangements with preferred suppliers.

However, ministries are able to identify and inform SCO about goods or services that they think could be procured at discount prices in bulk. In their questionnaire responses, ministries told us they think there are additional opportunities to procure goods and services such as ergonomic assessment services, first aid/CPR training, translation

services other than French and security installation services. Preferred supplier arrangements for these goods or services do not currently exist. SCO is not aware of all the goods and services that ministries frequently procure in large quantities. Information from the ministries will help them do this.

A consulting report commissioned by SCO and received in 2015 identified procurement best practices, including bundling of related goods and services, which could allow the government to take advantage of additional bulk buying opportunities. The report also noted that SCO is not applying these best practices. In 2015/16, preferred suppliers reported to SCO that ministries bought about $460 million worth of goods and services from them. This is only about 13% of the $3.5 billion that they spend each year on goods and services. Therefore, it is likely that there are opportunities for the government to take advantage of additional bulk buying.

RECOMMENDATION 7

In order for Supply Chain Ontario to explore new bulk buying opportunities that could lead to additional cost savings, it should work together with ministries to:

- identify goods or services that ministries currently procure that are suitable for such opportunities; and
- identify ways in which in the future it can have access to complete and accurate information about what and how ministries procure.

MINISTRIES AND SECRETARIAT RESPONSE

We support the Auditor General's observation that new bulk buying opportunities should be explored to generate additional savings. The Ministry of Government and Consumer Services (MGCS), through Supply Chain Ontario, has launched a multi-year strategic sourcing and category management strategy to enable the identification of further bulk buying opportunities.

The strategy will include a procurement spend analysis that will help identify new bulk buying opportunities and provide a methodology to undertake spend analyses more regularly.

MGCS will continue to work with Treasury Board Secretariat to explore opportunities to gain more complete and accurate insight into the government's procurement spending.

4.3 New Online Tendering System Not Widely Used

The procurement requirements state that ministries are to use the online tendering system managed by SCO for all open competitive procurements with a value at or above $25,000 for goods and at or above $100,000 for services.

On April 1, 2014, SCO replaced its old tendering system by competitively procuring a new system for the Ontario Tenders Portal. The new system was implemented with the intention of making the tendering process more efficient through a streamlined and paperless evaluation process, especially for the more complex procurements where bids contain vast amounts of paper documents. SCO did not pay anything for the new system. Rather, the provider of this system makes money by charging suppliers a fee for using the Ontario Tenders Portal.

We found that almost two-and-a-half years after post-implementation, this new system has not been as widely adopted to evaluate suppliers' bids as originally anticipated by SCO. Ministries use the system to post all of their tenders. However, suppliers continue to submit bids in paper form that need to be evaluated manually. Many of these bids contain large amounts of paper documents, which are the kind of bids that the new system was implemented to handle.

When SCO implemented the new system, it intended to evaluate all bids using this system by June 2015. When we reviewed how many bids were evaluated using the new system, we found that in

2014/15, out of 470 tenders only about 1.3%, or six tenders, were evaluated using the new system. Bids for the remaining tenders were submitted in paper form and were evaluated manually.

In 2015/16, the usage of the new system increased to about 146, or 32%, of 458 total tenders that year, but we noted that only about one hundred of these were complex tenders. Bids for another 145 complex tenders were still handled in paper form and reviewed manually.

4.3.1 Concerns Raised Regarding System's Design

To speed up the adoption of the new system to evaluate bids, in January 2016, SCO stated that it intends to use this system to evaluate bids on tenders it assists ministries with starting in January 2017. There are, however, serious concerns that a poor design of this system inhibits ministries from properly evaluating suppliers' bids on complex tenders and is impacting the fairness, openness and transparency of these complex tenders.

In December 2015, a Fairness Commissioner (an individual who presides over a procurement to ensure it is done in a fair, open and transparent way) wrote to SCO saying that the system's poor design does not allow bid evaluators to do the required level of due diligence on complex procurements. The Fairness Commissioner has been involved in a number of ministries' tenders since 2003. His concerns stemmed from his involvement in a number of complex tenders conducted in 2015/16. The Fairness Commissioner found that the system restricts suppliers from inputting some bid information. This limits their ability to be fully transparent. The Fairness Commissioner also had concerns that some automatic system features used to evaluate bids do not take into account non-tangible bid evaluation criteria such as quality, approach and creativity, and that this could compromise the fairness of complex tenders.

These concerns were echoed by senior executives from two other ministries who expressed to SCO similar concerns about the new system.

To deal with shortcomings of the new system, ministries must develop manual alternatives to ensure tenders are done in a fair, open and transparent way by having suppliers submit parts of their submissions in paper form.

RECOMMENDATION 8

Supply Chain Ontario should identify and resolve all system issues that prevent any tender from being done in a fair, open and transparent way.

MINISTRIES AND SECRETARIAT RESPONSE

The Ministry of Government and Consumer Services (MGCS) agrees that system issues should not prevent any tender from being conducted in a fair, open and transparent manner.

Working with its current service provider, MGCS has resolved, and continues to work to resolve, issues identified as potential system barriers.

We will continue to seek feedback from our own procurement specialists, ministry buyers and businesses using the system to identify and resolve issues to ensure the system can support both simple and more complex procurements.

4.3.2 Suppliers Now Charged Higher Bid Fees

We also found that the new bid fees charged to suppliers are two and half times higher for unlimited access than those charged before the new system was implemented.

Prior to the implementation of the new system, suppliers had an option to either pay to the previous system supplier an annual fee of $203.40 to have unlimited access to view all government procurements, or pay $39.95 to view just one. The old system did not permit suppliers to submit bids

electronically and suppliers were not charged for submitting paper-based bid. When the new system was implemented, fees changed and increased. Suppliers can view all government procurements for free, but must now pay an annual fee of $750 to submit bids or $300 to submit just one bid. We compared these new fees with those charged in other jurisdictions: Quebec, British Columbia and the federal government. We found that Quebec and the federal government do not charge any fees, and that fees in British Columbia are much lower, at an annual fee of $150. Representatives from Quebec and the federal government told us that they do not charge fees because such practice can discourage small businesses from bidding on government contracts.

RECOMMENDATION 9

In order to determine the impact of access fees on small businesses for the online procurement system, Supply Chain Ontario, together with ministries, should review whether Ontario's fees discourage small businesses from bidding on government contracts. The results of this review should be factored into future decisions.

MINISTRIES AND SECRETARIAT RESPONSE

The Ministry of Government and Consumer Services agrees with this recommendation and has launched an initiative to measure various metrics related to the use of the Ontario Tender Portal to track how many businesses are downloading tender documents and submitting bids electronically. All businesses that access the tender portal are now invited to complete a survey on the electronic tendering process, including identifying the reasons why they may not submit a bid. This data will be used to inform future electronic tendering process enhancements.

4.4 Shortage of Internal IT Staff Has Led to a Dependency on More Costly External IT Consultants

IT Consulting Services is the government's largest preferred supplier arrangement both in terms of the number of suppliers and taxpayer monies spent. As of September 2016, there were about 291 preferred IT consulting service suppliers. In 2015/16, the government paid these suppliers about $170 million, and in the year prior to that about $160 million.

Suppliers are added to this arrangement by SCO. However the actual procurement from this arrangement, together with internal government IT employees, is managed centrally by the Treasury Board Secretariat (Secretariat). When ministries need IT assistance, they ask the Secretariat to provide them with an IT employee or, if none are available, help them select preferred suppliers from whom they can procure consultants.

The procurement requirements discourage continuous reliance on consultants. In most instances, continued reliance is more expensive and permits a consultant to gain a monopoly on a particular kind of work. Ideally, consultants should only be used on a short-term basis to fill highly skilled, specialized roles. The Secretariat has a complement of over 200 internal permanent IT employees to fill ministries' IT staffing requests to reduce the government's need to hire IT consultants. It also manages the procurement and evaluation of IT consultants.

We found that a shortage of internal IT employees has resulted in dependency on the use of IT consultants. The Secretariat estimates it costs the government more than $40,000 extra on an annual basis for each consultant used in place of a permanent IT employee. Another reason why the cost of using consultants is higher is because of fees paid to preferred suppliers who provide the consultants.

We noted that the Secretariat does not have a sufficient number of internal IT employees to fill all ministries' requests. As a result, ministries rely excessively on external IT consultants. We reviewed the number of ministry requests for IT support

that are filled by permanent IT staff and found that in 2014/15, less than 10%, or 125 of the 1,809 ministry requests for IT help, were addressed by permanent IT employees. The remaining 90% were addressed by external consultants. For 2015/16, the ratio was about the same: only 116 out of 1,456 requests were filled by internal IT employees.

A review done by the Secretariat found that during 2013/14, almost 20% of all consultants were doing ongoing, operational-type support activities that could have been done by permanent IT employees. Given that a consultant costs an estimated extra $40,000 annually, and given that about 20% of all consultants are doing the work that can be done by permanent employees, the Province could potentially save about $10 million annually if it increases its IT staff complement and reduces its dependency on external IT consultants.

RECOMMENDATION 10

In order to ensure that IT consulting services arranged for ministries by the central IT group in the Treasury Board Secretariat are cost-effective, the Secretariat should:

- finalize its review and conclude that it is appropriate to reduce the use of external IT consultants and increase the use of permanent IT employees; and
- set a target for the number of permanent employees it needs and work toward meeting this target.

MINISTRIES AND SECRETARIAT RESPONSE

Treasury Board Secretariat (Secretariat) acknowledges the recommendation of the Auditor General and agrees to address these recommendations by implementing the following:

- A review has been completed for the Information & Information Technology (I&IT) organization for 2013/14 and 2014/15. Based on this review, the Secretariat received approval to convert 96 IT consultants to full-time employees.
- There is the potential to convert additional IT consultants to full-time employees as we continue to analyze the movement of IT projects from development to sustainment, in consultation with our ministry partners.

4.4.1 Middleman Agencies Add to Cost of Consultants

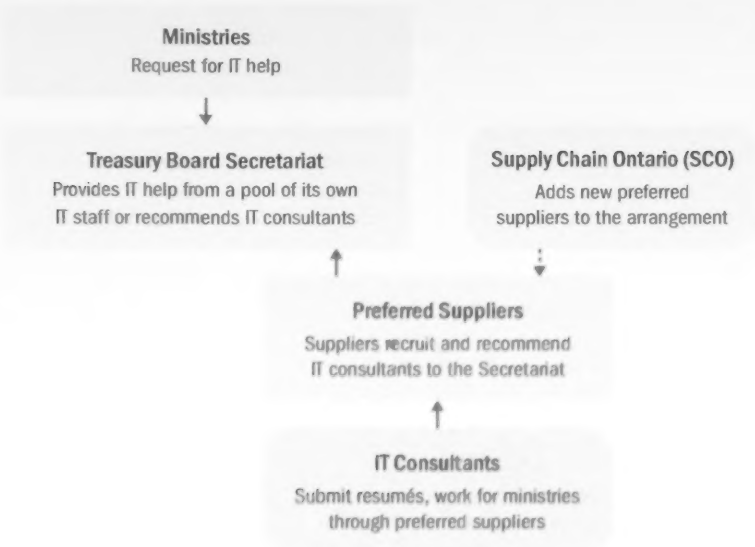
Preferred suppliers are not the IT consultants who do the actual work but are, in most cases, agencies that act as middlemen. These agencies bid on ministry contracts and supply consultants with the requested IT skills that the ministries are looking for. **Figure 9** illustrates the process. The Secretariat pays a fee to these agencies each time it places an IT consultant with a ministry.

Ministry staff evaluate the consultants recommended by the agencies and decide whom to hire, and in many cases the ministries repeatedly renew these contracts. For each renewal, ministries are again charged a fee on top of what is paid to the consultants for actual work done.

In 2015, the Secretariat conducted a review of the rates the government pays for IT consultants. It found that they were 10% higher when compared to market rates paid by similar large private institutions, such as banks. Based on this market rate review study, the Secretariat calculated a one-time estimated potential cost savings of $22.5 million over the two fiscal years 2016/17 and 2017/18 if it could pay these lower per diem rates.

Although the Secretariat told us that it is working on reducing consultant rates, it is not looking at the fees charged by the middleman agencies. These fees are not shown separately on invoices submitted by the middleman agencies. We wanted to find out how much these agencies charge on top of what consultants are paid so we could find out how much this costs the government annually. The Secretariat could not tell us this information either, because it has not asked agencies to explain what they charge.

Figure 9: How IT Consultants Are Supplied to Ministries
Prepared by the Office of the Auditor General of Ontario


Ministries
Request for IT help
Treasury Board Secretariat
Provides IT help from a pool of its own IT staff or recommends IT consultants
Supply Chain Ontario (SCO)
Adds new preferred suppliers to the arrangement
Preferred Suppliers
Suppliers recruit and recommend IT consultants to the Secretariat
IT Consultants
Submit resumés, work for ministries through preferred suppliers

RECOMMENDATION 11

In order to ensure that the Ontario Government's ministries procure IT consulting services in the most economical and cost-effective way, the Treasury Board Secretariat, together with Supply Chain Ontario, should:

- determine the impact of middleman fees charged by preferred suppliers on IT consultant rates paid by the government;
- use this information together with other information about consultants' market rates to (as part of the internal/external IT consulting review noted in Recommendation 10) study and recommend the most economical and cost-effective way for the government to procure IT consulting services; and
- periodically continue to monitor that the government is receiving the most competitive IT consulting rates.

MINISTRIES AND SECRETARIAT RESPONSE

Treasury Board Secretariat (Secretariat) and the Ministry of Government and Consumer Services (MGCS) acknowledge and agree that IT consulting services must be acquired in the most economical and cost-effective way. To that end, we are working together to develop a strategy for the next generation of the IT consulting services preferred supplier arrangement for implementation in October 2017. In doing so, the Secretariat and MGCS are assessing recommendations made in a 2016 study of the current acquisition model, best practices in other jurisdictions and the private sector, and factoring in industry consultations. In the interim, work is already underway, such as using market-based consulting rates as a way to establish ceiling costs for IT projects that preferred suppliers bid on.

4.5 Weak Controls and Oversight over Procurement of IT Consultants

We found that ministries are not following their own best practices when hiring IT consultants. This includes not properly evaluating applicants through in-person interviews and reference checks.

4.5.1 Controls over the Procurement of IT Consultants Are Not Followed

Ministries are not always following best practices, such as conducting in-person interviews, to evaluate and select IT consultants. Because of this they may not always be selecting the most qualified candidate. This also creates opportunities for fraud.

The Secretariat has developed best practices for ministries to follow when hiring IT consultants. These best practices are there to help ensure that ministries select the most qualified candidates. We list some of the more important best practices in **Figure 10**.

We found that ministries are not always following these best practices set out by the Secretariat. In our testing we found that:

- in some cases, there have been fewer than three ministry staff involved in the evaluation and selection of consultants;
- in one case, a consultant was involved in the evaluation and selection process of another consultant;
- in some cases, consultants with whom ministries did not have previous experience were hired without an in-person interview; and
- in many cases documentation to support at least one reference check was missing.

In the majority of files we reviewed, we also found that the ministry person who authorized payment requests from the agency was involved in the hiring of its IT consultant. If only one person is involved in hiring an IT consultant, this person can hire a consultant and no one else checks that the consultant actually does any work. The Secretariat, which processes payments made to agencies providing the IT consultants, does not review them or question any anomalies, such as a high number of days or hours billed by consultants in a short period of time. The Secretariat assumes approved payments are correct.

The situation creates opportunities for fraud. Our audit noted a situation where a senior manager at one ministry was aware of these internal control weaknesses and proceeded to create and hire a phantom consultant. The senior manager created a fake resumé and sent it to a preferred supplier. The resumé matched the skills that the manager was looking for. Based on the resumé, the preferred supplier unknowingly recommended the phantom consultant to the senior manager, who hired him from a list of candidates. Over a period of several months, the senior manager approved the phantom consultant's invoices that billed for every day of the month and pocketed about $150,000 for services never rendered.

When we discussed this situation with senior management at the Secretariat, they told us that they became aware of this fraud in 2014, some time after the senior manager left the ministry for another job. However, our review showed that the

Figure 10: Treasury Board Secretariat's Best Practices for Hiring IT Consultants

Prepared by the Office of the Auditor General of Ontario based on the Ontario Public Service Procurement Directive

Best Practices for Hiring IT Consultants
• At least three individuals should be involved in the evaluation and selection process.
• Only government employees should be evaluating and selecting consultants.
• In-person interviews should be conducted with each qualified candidate, unless one candidate is clearly more suitable and the ministry has had prior experience with this consultant.
• At least one reference should be contacted for the successful candidate.

Secretariat has not addressed the control weaknesses that allowed this fraud to take place. Nor have they investigated whether any other cases of fraud have occurred. The Secretariat's senior management have also not discussed this issue with their staff so that they could implement preventive measures to detect any such potential payments in the future.

RECOMMENDATION 12

In order to ensure that ministries select the most qualified IT consultants and opportunities of fraud are reduced, the Treasury Board Secretariat should:

- work together with ministries to ensure that they follow the Secretariat's best practices when hiring IT consultants;
- review all payments to IT consultants for any anomalies; and
- verify the existence of IT consultants working for the ministries.

MINISTRIES AND SECRETARIAT RESPONSE

Treasury Board Secretariat (Secretariat) agrees with this recommendation and will be implementing the following:

- The Secretariat will enhance current processes by ensuring that best practices are shared with ministries as part of the hiring process of IT consultants;
- The Secretariat will improve controls for validating payments to IT consultants by ensuring adequate segregation of duties and addressing potential anomalies;
- The Secretariat will work with ministry partners to look at strengthening the hiring of IT consultants through a review of verification and identification controls, which may include enhanced security screening, social insurance number validation and in-person interviews; and
- The Secretariat has engaged the Ontario Internal Audit Division to review current processes and validate enhancements implemented for the acquisition of IT consultants and make recommendations where processes can be further strengthened.

Appendix 1: List of Government's Internal Resources

Prepared by the Office of the Auditor General of Ontario, based on the Ontario Public Service Procurement Directive

Name of Service	Supplier Ministry
Advertising	Ministry of Government and Consumer Services
Arrangements for Non-Scheduled Air Travel	Ministry of Natural Resources and Forestry
Banking Services	Ministry of Government and Consumer Services
Government Telephone Directory	Ministry of Government and Consumer Services
Government-Wide Employee Human Resources Information System	Ministry of Government and Consumer Services
Insurance	Ministry of Government and Consumer Services
IT Help Desk	Ministry of Government and Consumer Services
IT Support	Ministry of Government and Consumer Services
Large Items Waste Disposal Services	Ministry of Government and Consumer Services
Legal Services	Ministry of the Attorney General
Medication and Medical Supplies	Ministry of Health and Long-Term Care
Non-Commissioned Opinion Polls	Ministry of Government and Consumer Services
Passenger Vehicles Acquisition and Disposal Services	Ministry of Transportation
Payroll and Benefit Services	Ministry of Government and Consumer Services
Purchase of Space and Time in the Domestic Media	Ministry of Government and Consumer Services
Realty Services	Ontario Infrastructure Lands Corporation
Staff Recruitment Advertising	Ministry of Government and Consumer Services
Translation Services	Ministry of Government and Consumer Services and Ministry of the Attorney General
Travel Services	Ministry of Government and Consumer Services
Voice Telecommunication Equipment and Audio Conferencing	Ministry of Government and Consumer Services

Appendix 2: Preferred Supplier Arrangements Managed by SCO

Source of data: Supply Chain Ontario

Type of Good or Service	# of Arrangements	# of Suppliers
Administrative services	3	4
Cleaning supplies	1	1
Consulting		
• IT Consulting Services	1	291
• Management Consulting Services	1	271
• IT Project Consulting Services	1	124
Copy paper	1	1
Courier services	1	1
Dairy products	1	5
Employee support (including employee assistance program, relocation support and mediation services)	3	20
Event staging equipment and technical support	1	9
External audit services	1	15
Fuel (including for aircraft)	3	12
Groceries (including dry and frozen foods, kitchen supplies and fresh bread)	2	2
Laboratory supplies and services (including hazardous waste collection)	3	7
Learning and development services (including executive coaching and French fluency evaluation)	3	137
Office seating and furniture supply and installation	1	5
Office supplies	1	1
Paging/mobile devices and services	1	5
Research services and subscriptions (including market research, policy formulation and evaluation, and program development)	2	33
Security services (including security assessments, training, staffing and screening)	3	16
Software solutions, IT security products and software licences	13	54
Staffing services (including temporary help and recruitment support)	2	45
Travel services (including airfare, rail fares, car rental and accommodation at government rates)	8	9
Vehicle purchasing, upgrades, disposal and related maintenance	5	14
Total	**62**	**1,082**

Chapter 4

Toward Better Accountability

Each year, our Annual Report addresses issues of accountability and initiatives to help improve accountability in government and across the broader public sector. This year, in addition to issues of accountability raised in our value-for-money audits, we present the following four reports:

- **Accounting Treatment of Pension Funds**—The province's treatment of pension funds in its 2015/16 consolidated financial statements is discussed in **Chapter 2** of this Annual Report. In an effort to provide more clarity on this issue, we have also included a background summary in this chapter.
- **The Provincial Public Appointment Process**—Timely appointment of qualified candidates to the Province's various agencies, boards and commissions, as well as other entities, is essential to ensure the proper functioning of the entities and to ensure that the public's interests are protected. As this section of the chapter highlights, there is considerable room for improvement in the process to ensure that there is an effective and transparent appointment process that serves the public well.
- **Information and Information Technology General Controls**—Given the importance of I&IT systems and the valuable information they contain, we wanted to gain an understanding of the processes and controls in this area.
- **The Nursing Retention Fund**—The purpose of the Nursing Retention Fund (Fund) was to retain nursing positions in Ontario public hospitals where a service change in a hospital, such as a reduction in programs or services or the closure of a unit, resulted in nurses being laid off. The Fund intended to accomplish this purpose by disbursing money to eligible hospitals for nurses' education and training, and nurses' salaries and benefits for up to six months while receiving this education and training. Our review of the Fund looked at why only limited funds were distributed to hospitals during its operation. We found that, while the Fund was appropriately administered, the eligibility criteria established for the Fund limited the circumstances under which hospitals would be eligible to request the funds.

Chapter 4
Section
4.01

Accounting Treatment of Pension Funds

1.0 Introduction

Ontario's public-service pension plans have a significant impact on the province's financial position and on its annual fiscal results. In its March 31, 2016, consolidated financial statements, Ontario reported a pension and other employee future-benefits liability of $12.1 billion, and a total expense of $2.7 billion.

While pension accounting is complicated, an understanding of a few basic concepts can help answer the important questions regarding the province's pension balances.

This chapter explains key concepts underlying the province's pension liability and pension expense, how they are calculated, and what factors influence the amounts reported in the consolidated financial statements.

2.0 Nature of Pension Plans

A pension plan is funded by an employer, and sometimes an employee, during an employee's working years. Pension payments are later made to retired employees from the pension plan.

The assets of a pension plan are held in a pension fund. A pension fund is typically established as a legal trust that receives contributions from its sponsors, invests the contributions, and makes benefit payments from its pool of invested assets to retired employees.

2.1 Entities Involved in a Pension Plan

A pension plan is usually an arrangement in which an employer provides benefits to retired employees in exchange for their years of service. The employer is usually the organization that decides to create, or sponsor, a pension plan, although labour unions also sponsor them.

A pension plan sponsor incurs costs when it contributes to a pension fund. In some plans, working employees (also known as "active" employees) may also make contributions to the pension fund. They may do so as plan members or, in some cases, they act as plan co-sponsors alongside the employer.

A pension fund is a separate legal and accounting entity that maintains its own accounting records and prepares its own audited financial statements. It is beyond the scope of this report to discuss the process for maintaining pension-fund records and preparing financial statements; instead, this report addresses pension accounting and reporting by an employer acting as a plan sponsor.

Figure 1 illustrates the three organizations typically involved in a pension plan and the flow of cash among them.

2.2 Types of Pension Plans

There are two basic types of pension plans: *defined-contribution plans* and *defined-benefit plans*. The plans differ in how benefits to pension recipients are determined, and who bears the ultimate risk associated with the amount of future benefits to be paid to retired employees.

For accounting purposes, defined-benefit plans can be further broken down into sole-sponsored, jointly sponsored and multi-employer plans. These sub-types dictate how a sponsor accounts for the plans, and differ in the number and types of entities sponsoring the plan as well as how risk is shared between them.

2.2.1 Defined-Contribution Plans

In a defined-contribution plan, the employer specifies how much it will contribute to the pension plan. In other words, the employer's total payments under the plan (and employee contributions, if any) are known up front.

The amount of the pension benefit to retirees is determined at the time of retirement and is based on the amount of the accumulated contributions plus total investment returns (or losses) the fund has generated over time.

The defined-contribution plan defines only the employer's (and employee's) contribution, and makes no commitment regarding the amount of benefits to be paid out upon retirement. Once the employer has made the specific contributions required by the plan, it has no further obligations. The active employees bear the risk associated with not knowing what their pension benefits will be until they retire.

In practice, a typical defined-contribution plan deducts employee contributions directly from their pay, with a pre-defined portion of these contributions matched by the employer.

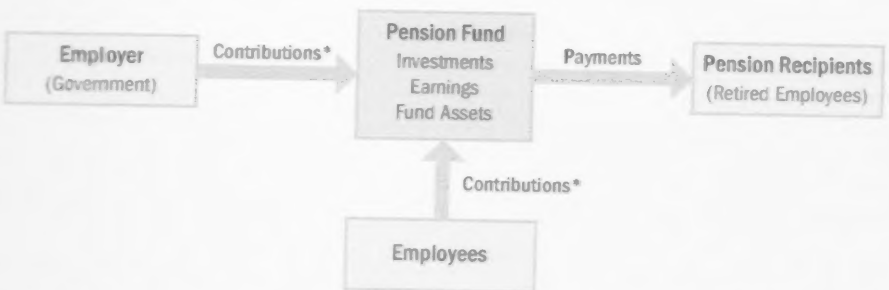
Accounting is straightforward for defined-contribution plans. The employer simply contributes amounts each year based on the contribution formula established by the plan, so the employer's annual cost (pension expense) is simply the amount that it is required to contribute to the plan. The employer only records a liability to the extent that its required annual contributions have not yet been paid, essentially an account payable to the pension fund.

2.2.2 Defined-Benefit Plans

A defined-benefit plan specifies the pension amount that employees receive in retirement, and the employer guarantees this defined amount. In other words, the risk of ultimately funding the promised defined benefits is borne by the employer, which is the plan sponsor.

Figure 1: Entities Involved in a Pension Plan and Flow of Money Between Them

Prepared by the Office of the Auditor General of Ontario



* In certain plans, employees may also contribute to the pension fund. Employees contribute to Ontario's five major public sector pension plans

Unlike a defined-contribution plan, the amount of defined-benefits paid is determined by a formula that typically considers a variety of elements: employee age and years of service, for example, are multiplied by a factor such as the employee's average annual earnings over a period of time when the employee's earnings are normally at their highest.

In order to meet the plan's future commitments, the sponsor(s) must determine how much money it/they should contribute to the plan today so that there is enough money down the road to pay the benefits defined by the plan. A defined-benefit plan specifies benefits in terms of uncertain future variables such as salary before retirement and years of continuous service, so the sponsor's funding patterns must take these uncertainties into account. The funding level therefore depends on assumptions such as employee life expectancy, turnover, future salary levels, years of service and long-term interest rates.

The sponsor(s) is/are responsible during the life of the plan to ensure the plan has enough money to pay the defined benefits regardless of the performance of the pension fund, and must make up any shortfall in the accumulated assets of the trust.

However, the reverse also applies: the sponsor(s) may claim surpluses accumulated in the trust, either by taking a contribution "holiday," or through a refund of excess contributions, subject to certain legal and regulatory restrictions (refer to **Section 7.0** for further discussion of this topic).

A defined-benefit plan's primary purpose is to manage and invest assets to ensure there will be enough money to meet the plan's obligations to retirees.

With respect to the five public-sector pension plans reported in the province's consolidated financial statements, each has sole responsibility for investing its respective assets, as well as preparing and filing periodic reports with provincial regulators in accordance with the *Pension Benefits Act*. Each plan also prepares its own set of financial statements that are subject to an annual external audit. Refer to **Section 2.3** for further discussion of Ontario's public-sector pension plans.

The pension expense recognized by the plan sponsor each period is rarely equal to the cash contribution actually made. Similarly, the pension obligation is a complex calculation because its measurement and recognition relate to unknown future variables projected over long periods. Thus, accounting for this type of plan is complex.

2.2.3 Jointly Sponsored Pension Plans

A jointly sponsored pension plan is a defined-benefit plan in which an employer shares risks and rewards in the plan equally with the plan members, who are current employees and retirees. Since there are usually many individual plan members, an organization is typically formed to represent all of them collectively as a plan sponsor (e.g., an employee union or federation). This type of defined-benefit plan is most often seen in the public sector, while a defined-benefit plan where the employer is the sole sponsor is more typical of the private sector.

Jointly sponsored pension plans are governed by a formal agreement between the joint sponsors that give them shared control of the plan. The joint sponsors appoint a governing board with equal representation and a mutually agreed-upon chair. The governing board is usually responsible for ensuring the plan has enough money to meet its obligations to pension recipients. It does this by setting benefit levels, establishing contribution rates, and deciding how to address funding shortfalls and surpluses.

In a jointly sponsored plan, the employer and participants usually contribute equal amounts to the plan. In other words, the plan is structured such that the risk of ultimately funding benefits is borne equally by the employer and the employees as a group. Since the employer, as a joint sponsor, guarantees only half of each retiree's pension benefits, the employer only accounts for its half of the plan.

2.2.4 Multi-Employer Pension Plans

A multi-employer pension plan is a defined-benefit plan where two or more employers act as plan sponsors for their respective groups of employees. All of the employers contribute into a single pension fund, and the amount of these contributions is determined by legislation or one or more collective-bargaining agreements.

The contributions are not necessarily equal, because the employee groups of each sponsor differ in number, average age, and so on. The contributions of each employer are pooled into one pension plan, with assets in the fund available to all pension recipients previously employed by any of the sponsors.

This type of defined-benefit plan is most commonly found in the public sector, where the sponsors typically include a government and several other public-sector organizations.

Although multiple employers contribute to this type of plan, the responsibility to ensure that funding is sufficient to provide the benefits promised to employees ultimately rests with the sponsoring government. As a result, accounting rules require the government sponsor to account for 100% of the plan like a standard defined-benefit plan. The co-sponsoring public organizations are only required to account for their contributions to the plan, as they would for a defined-contribution plan.

2.3 Ontario's Public-Sector Pension Plans

The Province reported on five major pension plans in its March 31, 2016, consolidated financial statements:

- Public Service Pension Plan (PSPP);
- Ontario Teachers' Pension Plan (OTPP);
- Ontario Public Sector Employees Union (OPSEU) Pension Plan;
- Health Care of Ontario Pension Plan (HOOPP); and
- College of Applied Arts and Technology Pension Plan (CAATPP).

Figure 2 shows which category the Province's public-service defined-benefit pension plans fall under for financial statement reporting purposes.

The components of the total pension liability and expense are presented in **Figure 3** and **Figure 4**, respectively.

The Province directly sponsors three public-sector pension plans and has a statutory obligation for the payment of their retirement benefits. As plan sponsor, the Province is responsible for designing the pension plan, setting the benefits structure, and establishing, amending and/or winding-up the plans.

The five key public-sector pension plans reported in the Province's consolidated financial statements are all contributory defined-benefit pension plans, so employees bear part of the costs of the stated benefits, and are required to contribute to the plan along with the Province.

The Province is the sole sponsor of the PSPP and a joint sponsor of the OTPP and OPSEU plans. As such, 100% of PSPP's pension liability and expenses and 50% of each of OTPP's and OPSEU Pension Plan's liabilities and expenses are included in the Province's consolidated financial statements.

In addition to the three provincial sponsored public-sector pension plans, pension benefits for employees in the hospital and college sectors are provided by HOOPP and CAATPP, respectively. The Province is not the direct sponsor of these two plans, but it is a participating member. The Province

Figure 2: Classification of Ontario's Public Sector Pension Plans by Accounting Type

Prepared by the Office of the Auditor General of Ontario

	Type of Defined Benefit Pension Plan		
Pension Plan	Sole Sponsor	Jointly Sponsored	Multi-employer
PSPP	X		
OTPP		X	
OPSEU		X	
HOOPP*		X	X
CAATPP*		X	X

* HOOPP and CAATPP are jointly sponsored by participating employers (i.e., hospitals and colleges, respectively) and employees

accounts for these plans as jointly sponsored contributory defined-benefit plans in its consolidated financial statements because hospitals and colleges (i.e., the sponsors) under these plans are controlled by the government.

As the government is indirectly responsible for its share of any unfunded liability in these two plans, it has included approximately 48% of the pension liability of HOOPP and 50% of the pension liability of CAATPP in its March 31, 2016, consolidated financial statements.

Our discussions in the following sections deal with concepts applicable to these plans.

Figure 3: Ontario's Net Pension Liability Balance as at March 31, 2016

Source of data: Province of Ontario March 31, 2016, Annual Report and Consolidated Financial Statements

Pension Liability	($ million)
Obligation for benefits	117,542
Less: plan fund assets	(141,749)
Unamortized actuarial gains	12,649
Other adjustments	2,246
Accrued asset (subtotal)	**(9,312)**
Valuation allowance*	10,668
Net Pension Liability	**1,356**

* Valuation allowance is related to the pension assets of OTPP and OPSEU Pension Plan. See Note 18 to the Province of Ontario March 31, 2016, Consolidated Financial Statements for additional information. See also **Section 7.2** in this report.

Figure 4: Ontario's Pension Benefits Expense as at March 31, 2016

Source of data: Province of Ontario March 31, 2016, Annual Report and Consolidated Financial Statements

Pension Expense	($ million)
Cost of benefits	2,265
Amortization of actuarial gains	(145)
Employee contributions	(318)
Interest income	(870)
Other adjustments	(126)
Valuation allowance[1]	1,514
Subtotal	**2,320**
Add: HOOPP pension expense[2]	747
Add: CAATPP pension expense[2]	190
Total	**3,257**

1. Valuation allowance is related to the pension assets for OTPP and OPSEU Pension Plan. See Note 18 to the Province of Ontario March 31, 2016, Consolidated Financial Statements for additional information. See also **Section 7.2** in this report.
2. HOOPP and CAATPP amounts are recorded in the expenses of the Ministry of Health and Long-Term Care and the Ministry of Training, Colleges and Universities, respectively.

3.0 Key Pension Assumptions

3.1 The Role of Actuaries in Pension Accounting

Accounting for defined-benefit pension plans involves complicated mathematical considerations. As a result, organizations enlist the help of actuaries, who are trained to assign probabilities to future events and quantify their financial effects.

Actuaries help ensure that sponsors have established appropriate funding levels to meet future obligations, and they assist in reporting on pension plans. Employers rely heavily on actuaries for assistance in developing, implementing, and administering pension plans.

Actuaries make predictions, called actuarial assumptions, on factors such as mortality rates, employee turnover, interest rates, early retirement frequency, future salaries, and any other factors necessary to account for a pension plan.

The plan sponsor is responsible to select appropriate actuarial assumptions, often with guidance from the actuary, because pension benefits are paid far into the future.

Actuarial assumptions influence the value of the estimated liability at a point in time but do not determine the ultimate cost of the benefits, which will only be known when the benefits have been fully paid. The need to make assumptions in pension accounting is unavoidable, given that no one can know the future.

Using these assumptions together with current employee data and the plan benefit formula, actuaries compute the various pension measures that affect a sponsor's financial statements, such as the pension obligation and annual pension expense.

In summary, accounting for defined-benefit pension plans relies heavily on the measurements and judgments provided by professional actuaries.

3.2 Overview of Key Pension Assumptions in Ontario's Consolidated Financial Statements

There are two types of pension assumptions that a sponsor makes with input from their actuaries:

- ***Economic assumptions*** describe how market forces affect the amount of expected future benefits to be paid to plan recipients.
- ***Demographic assumptions*** describe the impact of plan-participant behaviours on the timing and probabilities of benefits being paid to them.

Note 6 to the Province of Ontario March 31, 2016, consolidated financial statements discloses the key actuarial assumptions that the province used to estimate its portion of benefit obligation and pension expense under each public-sector pension plan.

The economic assumptions relate to:

- discount rate;
- expected rate of return on plan assets;
- salary escalation rate; and
- inflation rate.

The demographic assumptions relate to the expected average remaining years of service (service life) of employees and mortality rates.

These key actuarial assumptions are described in more detail below.

Economic Assumptions

Discount rate—Under accounting standards for public-sector entities, a government has the choice of setting this rate with reference to expected pension-plan asset returns or the government's cost of borrowing (i.e., its long-term bond rate). Ontario has chosen to set the discount rate equal to long-term plan asset returns. This economic assumption is usually the most significant one that a sponsor determines (see **Section 4.0**). The discount rate is critical to calculations that determine a sponsor's pension obligation and pension expense.

Expected rate of return on plan assets—This assumption represents the sponsor's expectation of the long-term investment returns that the pension fund's assets will earn each year. In the Province's accounting for Ontario's public-sector pension plans, the expected rate of return on plan assets and the discount-rate assumptions are the same.

Salary escalation rate—Part of the estimate of an employee's future defined benefits at retirement involves the rate at which their salary rises over the course of their working life. The salary escalation rate reflects factors that can affect an individual's wages over time, including expected inflation, productivity, seniority, and promotion.

Inflation—This assumption helps determine other economic assumptions. General inflation is a fundamental starting point for setting each of the three economic assumptions above, because nominal interest rates, investment returns and salaries tend to rise and fall with changes in inflation.

Demographic Assumptions

Expected average remaining service life of employees—This figure represents the average remaining years of service for active employees in a plan. In accounting, this is the period over which unamortized net actuarial gains and losses (see **Section 5.3**) are amortized into pension expense. This figure changes with the average age of the current employee group (i.e., an older workforce has a shorter expected average remaining service life) and the demographic assumptions that affect expected years of service.

Actuaries use probabilities to model the uncertainty of behaviours that affect a participant's expected years of service and years in retirement.

For example, an employee's years of service and years in retirement are both affected by the employee's decision about when to retire—before,

at, or after age 65. Many current employees will only make this decision well into the future. In the meantime, for the purposes of their calculations, an actuary will assign probabilities to the various ages at which employees will choose to retire.

Years of service are also affected by assumptions that predict the proportion of current employees that will stop working for the plan sponsor before they retire because, for example, they leave voluntarily, are terminated, or become disabled.

Mortality rates—The length of time that a retiree will collect pension benefits depends on how long they live beyond retirement. Therefore, actuaries use mortality assumptions to estimate how long a pension plan will pay out defined benefits to a retired individual based on their demographic.

4.0 Impact of the Discount Rate on Pension Obligations

In order to understand how the discount rate impacts the province's pension obligations, it is useful to first understand the finance concepts of time value of money and present value.

4.1 Time Value of Money

The concept of time value of money is best explained in a simple way: a dollar today is worth more than a dollar in the future.

Imagine receiving $1,000 today and putting it in a simple bank savings account. That $1,000 will eventually grow over the years because the bank will pay interest on it. Thus, there is a greater benefit to getting the $1,000 now rather than later. If the amount is to be received later, it would be necessary to ask for more than $1,000 to compensate for the interest that could have been earned had the money been received today.

4.1.1 Present Value

Present value is the current worth of a sum of money to be paid in the future or a stream of future cash flows measured in "today's dollars." Money paid or received in the future must be discounted to reflect the current time value of money.

As explained earlier in **Section 3.2**, the specified rate of return used to discount future cash payments and receipts is called the discount rate. In the example above, we noted that $1,000 received in the future would be worth less than $1,000 received now.

To expand on this example, assume that the bank pays 2% a year in interest. After one year, that $1,000 would earn $20 in interest, and be worth a total of $1,020.

Thus, if the $1,000 was to be paid in a year's time instead of today, the recipient would want $1,020 to make up for the interest foregone in the year before payment. Therefore, the present value of receiving $1,020 in one year from today, assuming a 2% rate of return, is $1,000.

4.1.2 Changing the Discount Rate and Timing of Cash Flows

The discount rate and the timing of cash flows have a significant impact on the present value of future cash receipts and payments. We explore some examples below, still with the same $1,000 example:

- Instead of one year, assume that the money is to be received 10 years from now. If the money had been received today, it could have earned 10 years' worth of compounded interest. Using the same discount rate as above, 10 years of compounded interest would grow the initial $1,000 to $1,219. This means that the present value of receiving $1,219 in 10 years' time is, again, $1,000. The farther out in time the cash flows are received, the less they are worth today.

- Continuing with the previous example, consider a situation where you had to choose between receiving $1,000 today or $1,219 in 10 year's time. Based on the above example, you would be indifferent because receiving $1,000 today and growing it at a rate of 2% per year would give you the same value as receiving $1,219 in 10 year's time. Now, instead of a 2% rate of return, assume a 6% rate. At this new rate, investing $1,000 today would yield $1,791 after 10 years. By simply increasing the discount rate, it no longer makes sense to agree to receive $1,219 in 10 year's time when you should be able to make $1,791 by investing $1,000 today. Said differently, the present value of $1,219 is no longer $1,000—it's less because the higher rate of return means you only have to invest $688 at a 6% rate to have $1,219 in 10 years. Therefore, increasing the discount rate decreases the present value of future cash flows; decreasing the discount rate increases the present value of future cash flows.

4.2 Understanding How the Discount Rate Impacts Pension Obligation

Understanding the concepts of the time value of money, present value, and discount rates is necessary in any discussion of how to value pension obligations. In simple terms, pensions are promises of future payments to employees when they retire in return for their employment services now.

As these payments are made far out into the future, the mathematical concepts discussed earlier must be applied to determine the value of the Province's pension obligations as of the date of its consolidated financial statements.

The Province, with the assistance of actuaries, does this by calculating the present value of pension benefits to be paid to current and future retirees into the future. Naturally, the Province must determine a discount rate before an actuary can determine the present value of these future cash payments.

4.2.1 Discount Rates Used by the Province for its Pension Plans

The Province participates in, and reports, five major defined-benefit pension plans. In accordance with public-sector accounting standards, the Province must determine a discount rate for each of these plans.

Accounting standards used by the government do not prescribe a specific number or percentage to use in valuing pension obligations. Instead, they indicate that discount rates should be set with reference to plan-asset returns or the cost of borrowing. We discuss this in greater depth in **Section 8.3.1** of this Annual Report.

For all five of its major pension plans, the Province has chosen to set its discount rates based on plan-asset returns. Since pension plans generally operate under the assumption that they will continue into the future indefinitely, discount rates are set based on the Province's long-term expected rate of return. **Figure 5** shows the discount rates set by

Figure 5: Discount Rates Used by Ontario, 2006/07–2015/16 Fiscal Years (Years Ending March 31) (%)
Source of data: Province of Ontario Consolidated Financial Statements

Pension Plan	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16
CAATPP	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.25	6.00
HOOPP	6.50	6.25	6.25	6.25	6.25	6.25	6.25	6.25	6.00	5.75
OTPP	6.75	6.75	6.75	6.75	6.75	6.75	6.75	6.75	6.50	6.25
OPSEU	6.75	6.75	6.75	6.75	6.75	6.75	6.75	6.75	6.50	6.25
PSPP	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.50	6.25	6.00

the Province for each of its significant pension plans for the last five fiscal years.

Figure 5 shows that the discount rate used by the Province has very gradually decreased over the last five fiscal years. From the 2012/13 fiscal year to the 2015/16 fiscal year, the discount rate for all pension plans has decreased by only half of one per cent, or 50 basis points.

As discussed earlier, decreasing a discount rate creates an increase in the present value of the Province's pension obligations. However, under pension accounting standards, changes in the discount rate do not immediately impact the Province's pension liability in the year that they occur. Changes in the pension obligation arising from changes to the discount rate are considered actuarial gains and losses. As discussed in more detail in **Section 5.3**, these amounts are considered unamortized actuarial gains (losses), and are then gradually subtracted (added) to the Province's pension liability over the course of many years (i.e., over the course of the expected average remaining service life of employees).

4.2.2 Pension Obligation Sensitivity to Changes in the Discount Rate

The discount rate is one of the most significant assumptions the Province makes in valuing its pension obligations. While not required under public-sector accounting standards, it is useful to disclose in the notes to the consolidated financial statements a "sensitivity analysis" of how changes in the discount rates would impact pension obligations.

A sensitivity analysis looks at what-if scenarios with respect to a specific assumption, while holding all other assumptions constant. For example, a sensitivity analysis can illustrate what would happen to the Province's pension obligation if the discount rate was changed by an arbitrary number of basis points.

Given the downward trend of discount rates over the last five fiscal years, we looked at what would happen to the Province's total pension obligation if the discount rate was 25 basis points lower for all its pension plans (e.g., from 6.25% to 6.00%, 5.75% to 5.50%, and so on).

As at March 31, 2016, an "across the board" decrease in the discount rate of 25 basis points would have increased the Province's total pension obligation by more than $4 billion. While this change would not show up immediately in the Province's total pension liability, it would have a future impact of increasing the pension liability and pension expense over the course of many years.

Due to the mathematical properties of present-value formulas, a decrease in the discount rate has more of an impact than an increase of equivalent size. As such, an increase in the discount rate of 25 basis points would have a slightly smaller impact on the pension obligation in the opposite direction.

To further illustrate the sensitivity of the accrued benefit obligation to the discount rate, consider the OTPP as a case study. As at March 31, 2016, with respect to OTPP, the Province reported a pension asset before valuation allowance of $10.1 billion using a discount rate of 6.25% for its 50% share of the plan.

This implies a $20.2-billion pension asset before valuation allowance for the OTPP as a whole using the Province's assumptions set in accordance with Public Sector Accounting Standards. In contrast, OTPP's most recently available financial statements reported a deficit (net liability) of $1.8 billion as at December 31, 2015, using a discount rate of 3.25%.

OTPP sets its discount rate with reference to Province of Ontario bonds (i.e., one of the rates at which the Province borrows from investors) in accordance with accounting standards for pension plans and International Financial Reporting Standards. It should be noted that there are several other differences between the key economic assumptions used by the OTPP and those of the Province. However, by far the most significant difference in assumptions causing the disparity in measurement is the 300 basis point difference in discount rates.

Figure 6: Discount Rates Used by Selected Canadian Provinces to Value Pension Obligations
Prepared by the Office of the Auditor General of Ontario based on consolidated financial statements of selected provinces

Province	Consolidated Financial Statements as at:	Discount Rates (%)	
		Minimum	**Maximum**
Ontario	March 31, 2016	5.75	6.25
Alberta	March 31, 2016	5.40	6.80
British Columbia	March 31, 2016	6.50	6.50
Manitoba	March 31, 2016	5.00	6.25
New Brunswick	March 31, 2016	5.45	6.20
Newfoundland	March 31, 2016	5.80	6.50
Nova Scotia	March 31, 2016	6.70	6.70
Quebec	March 31, 2015*	6.75	6.95
Saskatchewan	March 31, 2016	6.50	6.50
Range		**5.00**	**6.95**

* Most recent consolidated financial statements available.

4.3 Discount Rates Used by Selected Canadian Provinces

In preparing this report, we surveyed publicly available financial reports to compare Ontario's discount rates to those used by other Canadian provinces to value their pension obligations. For comparison purposes, we included in our review only those pension plans that were active, had their own trust fund with plan assets, and were disclosed in the consolidated financial statements of other provinces. **Figure 6** shows the range of discount rates used to value the provinces' pension plans.

In summary, Canadian provinces generally use a discount rate of anywhere from 5% to 6.95% in valuing their pension obligations in their most recently published consolidated financial statements, and Ontario falls inside this range.

Given the similarity in discount rates, and the fact that all provinces in Canada follow accounting standards for public-sector entities, it appears that all other provinces also set their discount rates with reference to plan-asset returns.

5.0 Components of the Province's Pension Liability

The Province's public-service defined-benefit pension plans have three basic components:

- accrued-benefit obligations, or the future liabilities created by employees' service;
- plan assets, used to pay pension benefits; and
- unamortized actuarial gains and losses (see **Section 5.3**).

Setting aside unamortized actuarial gains and losses, when plan assets are less than the accrued benefit obligation, a net pension liability is recorded on the statement of financial position. A net pension liability is the estimate of the amount needed to pay for pension benefits that have been earned by current and past employees, less the pool of assets set aside in a trust to eventually pay for the benefits.

A net pension asset arises when plan assets are greater than the accrued benefit obligation. This comes about when total contributions to the plan, plus investment returns, are greater than the pension expense recognized since the start of the plan.

The following sections discuss the components that make up the pension liability reported in the

Province's consolidated financial statements. See **Figure 3** for pension note disclosure extracted from the notes to the March 31, 2016, consolidated financial statements.

5.1 Accrued Benefit Obligation

The accrued benefit obligation of a pension plan is measured as the estimated present value of all of the payments to be made to members when they retire, based on the service they have already rendered over their working lives under the plan.

The accrued benefit obligation of a pension plan changes each reporting period as follows:

Accrued benefit obligation, beginning of period
plus increase in accrued benefit obligation for current employee service (see **Section 6.1**)
plus increase in accrued benefit obligation for interest expense (see **Section 6.4**)
minus benefit payments to retired plan members
plus or minus actuarial gains and losses (see **Section 5.3**)
equals accrued benefit obligation, end of period

5.2 Fair Value of Plan Assets

Plan assets are the amounts contributed by the plan sponsor (government) and the plan members (employees) to the pension fund. The plan trust invests contributions in accordance with the plan's investment policies, with the aim of earning returns. However, they can also incur losses, for example, in market downturns.

The pension plan assets change each period as follows:

Plan assets, beginning of period
plus expected interest income on plan assets (see **Section 6.4**)
plus or minus excess (shortfall) of actual returns on plan assets over (under) expected interest income (see **Section 5.3**)
plus contributions received from all sponsor(s)
minus benefit payments to retired plan members
equals plan assets, end of period

5.3 Unamortized Actuarial Gains and Losses

A pension plan has actuarial gains (and losses) each year resulting from actuarial assumptions that have changed, and actual events during the year that do not exactly match previous long-term assumptions (referred to as "experience gains and losses"). Actuarial gains and losses are generated by both plan assets and the accrued benefit obligation separately.

Actuarial assumptions are updated for new information about the economic environment—the discount rate, for example, or plan-member demographics. These updates can create actuarial gains and losses from the benefit obligation or the plan assets, depending on the actuarial calculations the changes affect.

Experience gains or losses on plan assets occur because the actual investment returns were higher or lower than the expected returns. Experience gains or losses on the accrued benefit obligation occur because long-term assumptions—the discount rate, for example, or salary increases—were not met. In other words, despite best estimates, experience can render assumptions incorrect.

Actuarial gains and losses impact the net value of the pension liability measured by an actuary each period. For accounting purposes, all actuarial gains and losses are accumulated in an account called "unamortized actuarial gains/losses." Unamortized actuarial gains/losses are deferred through an accounting adjustment that removes them from the pension liability or asset balance. Because most changes in the pension liability flow through pension expense, the purpose of this adjustment is to "smooth" the sponsor's annual pension expense to account for year-over-year fluctuations between the sponsor's expectations and actual results. Without

this adjustment, annual pension expense could vary significantly year over year, creating fluctuations in a sponsor's annual accounting deficit or surplus.

6.0 Determining Annual Pension Expense

In general terms, pension expense reported in the statement of operations is driven by how much the pension liability increased during the year, net of returns on the plan's assets. Normally, pension liability increases as employees earn additional future benefits from an additional year of service, and as they get closer to collecting retirement benefits. These factors also increase the pension expense in the statement of operations.

Plan assets increase with returns that the plan earns on its investments, reducing the pension expense reported in the statement of operations.

The Province's annual pension expense consists of the following components (see **Figure 4**):

Cost of benefits earned by employees in the current year, i.e., service cost (see **Section 6.1**)
plus or minus amortization of accumulated actuarial gains (losses) (see **Section 6.2**)
minus employee annual contributions (see **Section 6.3**)
plus or minus interest income (expense) (see **Section 6.4**)
plus or minus change in valuation allowance (see **Section 6.5**)
equals total pension expense

Note that an employer's contributions are not part of the calculation of pension expense for a defined-benefit plan. As a result, employer contributions are rarely equal to pension expense (however, over the long run, the two tend to trend in the same direction).

In contrast, for a defined-contribution plan, an employer's annual pension expense is equal to their required cash contributions. This important distinction is often a point of confusion for users of financial statements who may incorrectly assume that the straightforward relationship between cash and pension expense in defined-contribution plans also applies to defined-benefit plans.

6.1 Service Cost

Service cost is the primary component of pension expense. Each year, a plan sponsor adds to the pension liability as part of its future compensation to employees for their additional year of service. Service cost is an actuarial calculation of the present value of future retirement benefits earned by employees in the current year. Service cost varies depending on job promotions, wage increases and date of retirement, all of which affect the final amount of benefits. Since service cost is a long-dated present-value calculation, it is the component of pension expense most sensitive to the discount rate.

6.2 Amortization of Actuarial Gains and Losses

Recall from **Section 5.3** that a defined-benefit plan has actuarial gains and losses each year because a plan's experience during the year does not exactly match the long-term assumptions set by the sponsor for actuarial calculations.

The accumulated gains and losses are deferred and treated as an accounting adjustment to the pension liability, for example, as disclosed in Note 6 to the March 31, 2016, consolidated financial statements for the Province of Ontario.

However, accounting requires a portion (equal to the unamortized balance divided by the expected average remaining service life of employees) of the total gains or losses to be included in calculating pension expense each year.

Recognizing a portion of accumulated gains decreases pension expense in a given year, whereas recognizing a portion of accumulated losses increases it. This "dripping" of portions of accumulated gains or losses into pension expense over

time is referred to as amortization. This accounting method is designed to avoid large year-over-year changes in a sponsor's annual pension expense due to short-term actual results varying from a sponsor's long-term assumptions.

6.3 Employee Contributions

In defined-benefit plans in which employees make contributions but a not joint sponsors (e.g., PSPP), employees directly offset some of the increase in the plan liability with their own contributions. Since this money is paid by the employees, but the sponsor accounts for 100% of the plan, the amount is simply subtracted from the sponsor's pension expense for the year.

In the case of jointly sponsored pension plans, the government sponsor only accounts for its half of the plan. Employee contributions only affect the employees' half of the plan and therefore, the sponsor's accounting does not need to reflect these contributions in any way.

6.4 Interest Income (Expense)

Interest income (expense) should not be confused with actual investment returns (losses) earned by the plan assets (e.g., interest on bonds, dividends on stocks, changes in value). Net interest income (expense) is an accounting calculation determined as the difference of two amounts.

First, interest expense is calculated by using the discount rate to grow the accrued benefit obligation because, with the passage of time, employees are one year closer to retiring and receiving their defined benefits.

Second, expected return on plan assets is calculated by using the assumed rate of return on plan assets to grow the plan assets for the same period. Actual returns higher or lower than this calculated amount are considered actuarial gains or losses from experience (see **Section 5.3**).

The net amount of interest expense and expected returns on plan assets is recorded in pension expense as interest income (expense).

Recall from **Section 3.2** that the discount rate and expected rate of return on plan assets are the same for the Province's accounting as sponsor of Ontario's public-sector pension plans. As a result, when the accrued benefit obligation is larger than the plan fund assets at the beginning of a fiscal year, the Province will recognize net interest expense. Conversely, when plan fund assets are larger than the accrued benefit obligation at the beginning of a fiscal year, the Province will recognize net interest income, which was the case in the March 31, 2016, consolidated financial statements.

6.5 Changes in Valuation Allowance

If the valuation allowance increases during the year, the change in the balance is added to pension expense. If the valuation allowance decreases during the year, the change in the balance is subtracted from pension expense. For a discussion of the valuation allowance, refer to **Section 7.2**.

7.0 Sponsor Accounting for a Pension Asset

7.1 Definition of a Pension Asset

A pension asset arises when total contributions by the sponsor of a defined-benefit plan (plus interest income) are greater than all pension expense since the plan's inception.

As shown in **Figure 3**, as at March 31, 2016, the Province had a net pension asset of $9.312 billion before considering any valuation allowance. This amount is comprised of pension assets in the OTPP and OPSEU Pension Plan of $10.668 billion, offset by $1.356 billion of accrued liabilities for all other defined-benefit pension plans the Province reports.

As with any recorded asset (e.g., accounts receivable, or a building), a pension asset signals that the sponsor can benefit from the asset in the future. However, unlike other types of assets, a sponsor does not own the plan assets in a pension trust. This unique accounting situation requires a sponsor to consider whether and when it can benefit from the surplus assets in a pension trust.

Before a sponsor can record a pension asset on its statement of financial position, the sponsor must first consider the "limit on the carrying amount of an accrued benefit asset," or, put more simply, the "pension asset ceiling." This ceiling is a test imposed by Public Sector Accounting Board (PSAB) standards on pension asset balances. This asset ceiling concept is discussed below.

7.2 Pension Asset Ceiling and Valuation Allowance

The pension asset ceiling is an annual calculation that requires a sponsor to record a valuation allowance for any excess of the pension asset over the sponsor's "expected future benefit." In determining the valuation allowance, PSAB standards require net unamortized actuarial losses to be subtracted from the pension asset. This requirement in the standard is not relevant to the Province's consolidated financial statements for the year ended March 31, 2016, because it has net unamortized actuarial gains.

A sponsor's expected future benefit is an estimated dollar amount representing the benefit a sponsor expects to realize from a pension asset. PSAB standards require a sponsor to calculate its expected future benefit as the sum of:

a) the present value of the sponsor's expected future service cost for the current group of active employees less the present value of required employee contributions and minimum required employer contributions regardless of any plan surplus; plus
b) the amount of plan surplus that can be withdrawn in accordance with the existing plan and any applicable laws and regulations.

In simpler terms, the above formula restricts a sponsor to only two possible sources from which to expect future benefits from a pension asset: (1) reductions in future required contributions to the plan, and/or (2) withdrawals of surplus funds from the plan trust.

A further restriction on the expected future benefits is that the sponsor must be currently entitled to benefit from reduced contributions or a surplus withdrawal. In accounting, the sponsor is not entitled to benefit from either source without the required approval of employees (i.e., a joint sponsor), a regulator and/or a court of law.

Once the expected future benefit is determined, the sponsor compares this amount to the pension asset. If the sponsor's expected future benefit is greater than the pension asset, the full amount of the pension asset is recorded on the sponsor's statement of financial position.

On the other hand, if the sponsor's expected future benefit is less than the pension asset, a valuation allowance is required. A valuation allowance simply reduces the pension asset on the statement of financial position to set it equal to the expected future benefit (i.e., the asset ceiling). Valuation allowances can increase or decrease in future years, depending on the updated balance of the pension asset and changes in the sponsor's expected future benefits from the two sources. All changes in valuation allowances are recorded in pension expense.

As shown in **Figure 3**, the Province recorded a full valuation allowance against the total amount of pension assets related to the OTPP and OPSEU Pension Plan as at March 31, 2016, in the amount of $10.668 billion. As a result, only $1.356 billion in net pension liabilities is recognized in the Province's March 31, 2016, consolidated statement of financial position. In this case, the expected future benefit of the pension assets was determined to be nil because the Province did not have an agreement with the joint sponsors to enable it to reduce contributions or withdraw the surplus.

Unless a government has unilateral access to the pension assets of a jointly sponsored pension plan,

the assets are only disclosed in the notes to their financial statements. The only provinces that have significant net pension assets are Ontario, British Columbia and New Brunswick. British Columbia and New Brunswick both note-disclose pension assets, but do not record them in their statement of financial position. This is the same practice that our Office supports for Ontario's treatment of pension assets. For a more in-depth discussion on our Office's position on Ontario's pension assets and the valuation allowance recorded in the March 31, 2016, consolidated financial statements, refer to **Chapter 2** of this Annual Report.

7.3 Factors That Give Rise to Pension Assets

As discussed in the previous section, a sponsor that over-fulfils its obligations to a pension plan may have to take a valuation allowance against the pension asset. Given this possible downside, one may ask why a sponsor would allow a net pension asset to grow in the first place.

In order to understand how a pension asset grows, consider the following relationship:

> Net pension asset, beginning of period (see **Section 7.0**)
> *minus* pension expense (see **Section 6.0**)
> *plus* employer contributions (see **Section 7.3.2**)
> equals net pension asset, end of period

Per the formula above, a pension asset grows when an employer's contributions exceeds pension expense. Two key factors that lead to this condition are discussed next.

7.3.1 Plan Assets Reduce Pension Expense

Plan assets can reduce pension expense in two interconnected ways.

First, recall that if a sponsor already has a net pension asset (i.e., plan assets are larger than the accrued benefit obligation at the beginning of a fiscal year), the sponsor recognizes net interest income, which reduces pension expense (**Section 6.4**).

Second, recall that in any given year, if plan assets returns are more than the expected return, the sponsor records the excess amount as unamortized actuarial gains (**Section 5.3**). Over a period of many years (i.e., the expected average remaining service life of employees), this gain is amortized to decrease pension expense and increase the pension asset.

If a plan trust consistently produces returns that are greater than the expected rate of return, the unamortized actuarial gain balance will grow, and so, too, will the annual amortization of those gains through pension expense.

As at March 31, 2016, the public-sector pension plan with the largest accrued pension benefit asset was the OTPP. **Figure 7** shows the OTPP's actual rate of return on plan assets relative to the sponsor's expected rate of return. Except for two notable exceptions, during the global financial crisis of 2007 and 2008, the OTPP's assets have consistently generated returns in excess of the Province's expected rate of return. Largely due to this trend, as at March 31, 2016, the Province reported an accrued pension asset before valuation allowance of $9.3 billion and $12.6 billion in accumulated unamortized actuarial gains. Net interest income on the accrued pension asset reduced pension expense by $870 million. Amortization of the accumulated actuarial gains also reduced pension expense by a further $145 million for the year ended March 31, 2016.

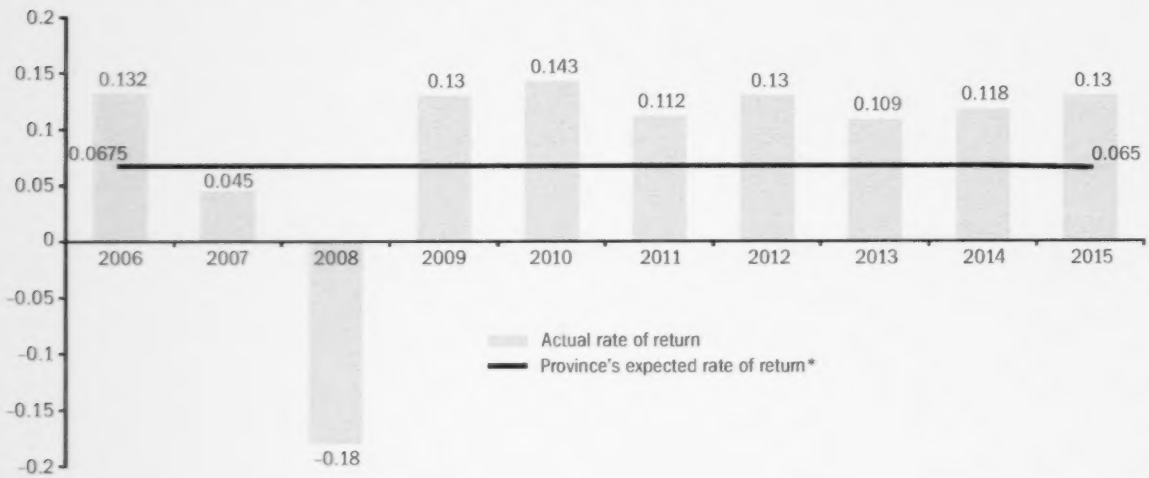
7.3.2 Contributions Exceed Pension Expense

If a plan trust's assets are producing returns large enough to cover the sponsor's pension expense, one might expect a sponsor to reduce its contributions in the upcoming year(s). However, there are at least two practical reasons why this may not be the case.

First, the sponsor may be part of a jointly sponsored pension plan or multi-employer plan, where funding decisions must be approved by other employers or the employees' collective-bargaining

Figure 7: Ontario Teachers' Pension Plan, Actual Rate of Return vs. Province's Expected Rate of Return, 2006–2015

Source of data: Ontario Teachers' Pension Plan 2015 Annual Report, Province of Ontario Consolidated Financial Statements



* Province's discount rate as at the beginning of each year.

representatives. This formal approval process can represent a practical barrier to making frequent, short-term adjustments in contribution levels.

Second, the key balances in defined-benefit pension plans (e.g., accrued benefit obligation and pension expense) are based on an actuarial valuation for ***accounting purposes***. In comparison, the level of cash contributions required to be paid by a plan's sponsors is determined by an actuarial valuation prepared for ***funding purposes***. A funding valuation is prepared in accordance with pension legislation and regulations, as opposed to accounting standards.

The main purpose of a funding valuation is to determine the required cash contributions to the plan. Although both actuarial valuations use similar present-value concepts in measuring a plan, the actuarial assumptions and computation models used can vary. As a result of these differences, while a sponsor may report a growing pension asset, the amount of funding surplus available (and/or the funding policies of the plan) may not allow for an immediate reduction in sponsor contributions.

Contributions exceeding pension expense due to the factors discussed above have been the significant driver in the growth of the Province's accrued benefit asset in the OTPP. **Figure 8** shows the growth of the accrued benefit asset of the OTPP since the 2001/02 fiscal year, and how this was driven by the excess of annual contributions over pension expense. Note that the difference between the two lines, representing cash contributions and pension expense in any given year, mathematically explains the entire increase in the pension asset before valuation allowance in the same year.

The OTPP pension expense shows significant fluctuations between the 2008/09 and 2015/16 fiscal years. Recall that in **Figure 7**, the OTPP's plan assets experienced a significant downturn in 2008 due to the global financial crisis and then strong returns thereafter. However, pension expense did not sharply increase in 2009/10. This is because under PSAB standards the Province has elected to smooth the market value of plan assets using a five-year rolling average. As a result, the losses incurred in 2008 were reflected in the market value of plan assets over the following five years, leading to the gradual increase in pension expense primarily through actuarial loss amortization. Similarly, as the OTPP experienced consecutive years of strong returns and actuarial gains to offset the 2008 losses, pension expense decreased in 2013/14 and every year thereafter.

Figure 8: Ontario Teachers' Pension Plan Accrued Benefit Asset*, 2001/02–2015/16 ($ million)

Source of data: Ontario Treasury Board Secretariat

* All figures before valuation allowance.

8.0 Upcoming Changes to Public Sector Accounting Standards

8.1 Public Sector Accounting Board

The Public Sector Accounting Board (PSAB) is the independent standard-setting body responsible for establishing standards and other guidance for financial reporting by all Canadian public-sector entities. These standards are more commonly referred to as public sector accounting standards, or PSAS. PSAB's membership consists of deputy ministers of finance, controllers general, legislative auditors, prominent public accountants with public-sector experience, and other experts in public-sector financial reporting. Members use their judgment and voice their own opinions independently of their associated governments or organizations.

8.2 PSAB Task Force on Employment Benefits

Occasionally, PSAB will commission task forces, advisory groups, consultative groups or study groups to aid in the development of financial reporting standards.

In December 2014, PSAB approved an Employment Benefits project, the objective of which was to review Section 3250, Retirement Benefits and Section 3255, Post-employment Benefits, Compensated Absences and Termination Benefits. The key issues at the time included the deferral of actuarial gains and losses, discount rate, shared-risk plans, multi-employer defined-benefit plans and vested sick-leave benefits.

In fall 2015, PSAB appointed the Employment Benefits Task Force to carry out the project, whose ultimate objective was to draft a new standard on employment benefits that replaces Sections 3250 and 3255.

PSAB has split the review into two phases:

- Phase I will address the specific issues related to the measurement of employment benefits, including the deferral provisions and discount-rate guidance in the standards. These are major areas of difference between PSAB and other accounting standard-setters. Consultations with stakeholders revealed that some found the financial information in public-sector financial statements to be less transparent and more optimistic than those reported in the private sector. PSAB intends to address these issues first and make amendments, if necessary, to the existing standards to enhance the quality of financial employment-benefits information reported in public-sector financial statements.
- Phase II will address accounting for shared-risk plans, multi-employer defined-benefit plans and sick-leave benefits, and other improvements to the standard.

The task force is currently working on a discussion paper that will be issued as part of an invitation for stakeholders to comment on the deferral provisions in Sections 3250 and 3255 in late 2016. A separate invitation to comment on discount rates is expected for 2017. These two invitations deal with the topics addressed in Phase I of the review.

In October 2016, shortly after releasing its unaudited consolidated financial statements, the Province issued a statement indicating that it would make the task force aware of its opinion on how pension assets should be treated in its consolidated financial statements.

8.3 Potential Impact on Ontario's Pension Liability (Asset)

Phase I of PSAB's employment-benefit project could potentially have a significant impact on the Province's accounting for pension plans in its consolidated financial statements. It is too early to assess the potential impacts of Phase II on the Province's consolidated financial statements. As a result, we will only highlight certain issues addressed in Phase I: discount rates and deferral provisions.

8.3.1 Discount Rate Guidance in Section 3250, Retirement Benefits

For greater clarity, Section 3250, *Retirement Benefits* is PSAB's primary guidance to financial statement preparers on how to account for pension plans under public-sector accounting standards.

Section 3250 does not prescribe what discount rate the preparer should use in calculating net pension obligation or surplus. Instead, it gives the preparer guidance on determining the discount rate with reference to their cost of borrowing or returns on plan assets. The Province has chosen to reference the former, allowing it to set the discount rates it uses to calculate its net pension obligations anywhere from 5.75% to 6.25%, depending on the plan. The historical performance of the pension plans' assets support these rates.

In contrast, if the Province had chosen to reference its discount rate to its cost of borrowing, it would have to set a significantly lower discount rate because the cost of borrowing is typically referenced to the current yield of long-term, publicly traded bonds issued by the province.

As a result, there is, in some cases, a difference of up to 3% (300 basis points) between a discount rate determined with reference to plan-asset

returns and the Province's cost of borrowing. As discussed in **Section 4.0** of this report, a difference of 300 basis points would likely result in a very significant difference in the amount of the pension obligation reported by the Province. This is especially true when it comes to large plans like the OTPP, where such a decrease in the discount rate would add billions of dollars to the actuarial measurement of the Province's pension obligation—that is, it would significantly increase its pension liability.

8.3.2 Discount Rates in International Financial Reporting Standards

In its review, the Employment Benefits Task Force highlighted that there were large areas of difference on discount rate guidance between PSAB and other accounting standard-setters.

International Accounting Standard (IAS) 19, *Employee Benefits*, is the equivalent standard under International Financial Reporting Standards as set by the International Accounting Standards Board.

Unlike Section 3250, IAS 19 does not allow the financial statement preparer to determine its discount rate with reference to plan-asset returns. Instead, it prescribes that the discount rate must be determined with reference to market yields on high-quality corporate bonds, or where there is no deep market in such bonds, by reference to market yields on government bonds. While the yield on high-quality corporate bonds would be marginally higher than on government bonds, it would still be significantly lower than the expected return on plan assets.

IAS 19 also has additional disclosure requirements for actuarial assumptions such as the discount rate. For example, IAS 19 requires the preparer to disclose a sensitivity analysis for each significant actuarial assumption as at the end of the reporting period, showing how the benefit obligation would have been affected by changes in the relevant assumptions that were reasonably possible at the time.

A sensitivity analysis would give readers information on how actuarial assumptions such as the discount rate could impact the Province's pension obligations. As noted in **Section 4.0** of this report, a decrease of 25 basis points across all discount rates used by the Province would cause the consolidated accrued benefit obligation to increase by about $4 billion as at March 31, 2016.

8.3.3 Deferral Provisions in International Financial Reporting Standards

In addition to discount rates, IAS 19 also does not allow the deferral of actuarial gains and losses. As discussed in **Section 5.3** of this report, Section 3250 allows the Province to defer experienced gains and losses.

The Province has $12.6 billion in unamortized net actuarial gains that will be slowly deducted from the pension liability over the span of 10 to 15 years, depending on the specific expected average remaining service life of employees in the plan. As discussed in **Sections 5.3** and **6.2** of this report, this method allows for a "smoother," more predictable pension expense year-over-year.

If the Province had included actuarial gains and losses in pension expense in the year that they occurred, it would have resulted in large year-over-year fluctuations. IAS 19 deals with this potential volatility by recording the fluctuations in a special account on a separate statement called Other Comprehensive Income. A concept equivalent to Other Comprehensive Income does not presently exist in PSAS. As a result, it is difficult to determine how potential changes to the deferral provisions in PSAS, if any, will affect the annual deficit or surplus of the Province in the future until more information is released by the task force.

9.0 Glossary of Pension Terms

Source: PS 3250, Retirement Benefits

accrued benefit asset—the amount of any pension asset recognized on a sponsor's statement of financial position before deducting any valuation allowance that may be required

accrued benefit obligation—the value of retirement benefits attributed to services rendered by employees and former employees up to the financial statement date

actuarial assumptions—best estimates of the occurrence of future events that will affect pension costs and obligations, including economic factors (e.g., interest rates, salary escalation, etc.) and demographic factors (e.g., expected average remaining service life of employees)

actuarial gains and losses—changes in the value of the accrued benefit obligation and plan assets resulting from changes in actuarial assumptions plus experience different from assumptions

actuarial valuation for accounting purposes—an assessment of the financial status of a pension plan for the purpose of determining pension liability and pension expense for financial reporting under accounting standards

actuarial valuation for funding purposes—an assessment of the financial status of a pension plan for the primary purpose of calculating required future contributions

actuary—professional trained to assign probabilities to future events and quantify their financial effects

defined-benefit plan—a type of pension plan that specifies either the benefits to be received by employees after retirement or the method (i.e. formula) for determining those benefits

defined-contribution plan—a type of pension plan in which the employer's contributions are fixed, usually as a percentage of compensation, and allocated to specific individuals

expected average remaining service life—the total number of years of future services expected to be rendered by an employee group divided by the number of employees in the group

expected future benefit—a calculated amount representing the benefit a government expects to realize from a plan surplus, which includes any withdrawable surplus or reduction in future minimum contributions

interest expense—an accounting calculation that represents the cost of financing an accrued benefit obligation for the year, netted against interest income and included in pension expense

interest income—an accounting calculation that represents the expected investment return on plan assets during the year, netted against interest expense and included in pension expense

jointly-sponsored defined benefit plan—a defined benefit plan between the government and another sponsor representing employees that has the following characteristics: (a) the sponsors co-operate towards a clearly defined common goal of providing benefits in exchange for employee service, (b) contributions are shared between the sponsors, (c) the sponsors share control of decisions related to administration, benefits, and contributions, and (d) the risks associated with the pension plan are shared between the sponsors

multi-employer defined benefit plan—a defined benefit plan to which two or more governments or government organizations contribute, usually pursuant to legislation or collective bargaining agreement(s) such that the contributions by one sponsor are available to provide benefits to retirees from any of the participating employers

pension asset (liability)—the sum of the current and prior years' pension expense less the sponsor's accumulated cash contributions since plan inception

pension benefits—the pension income expected to be provided after retirement to employees and their beneficiaries

pension expense—the cost of the retirement benefits promised during the year to employees in exchange for their employment services rendered

pension plan—any arrangement by which a program is established to provide retirement income and other benefits to retirees; typically, pension plans are established in the form of a fund into which money is paid by an employer (and sometimes an employee), during an employee's working years, and from which pension payments are later made to retired employees

pension trust—the separate legal and accounting entity in a pension plan that receives contributions from sponsors, invests the contributions, and makes benefit payments from its pool of invested assets to retired employees

service cost—the actuarial present value of benefits attributed to services rendered by employees in the current year that forms part of pension expense

sponsor—the organization that decides to create and fund a pension plan for employees; usually, employers or labour unions.

Chapter 4
Section
4.02

The Provincial Public Appointment Process

1.0 Executive Summary

Public appointments in Ontario are co-ordinated through the Public Appointments Secretariat ("Secretariat"), which was set up to both administer and provide support to ministries on the appointment process. It reports to the Treasury Board Secretariat. The Secretariat publishes information on its website about the appointment process, upcoming vacancies, how to apply for appointments, and specific details on all current appointments by agency (including the tenure, remuneration and position).

While it is good that the administration of the appointment process is centrally co-ordinated through the Secretariat, it (in conjunction with the ministries) has not ensured that the appointment of members to provincial agencies, boards and other entities is done in a timely and transparent manner. Timely appointments of qualified candidates to public agencies, boards and other entities are important for ensuring these organizations are well governed and meet their mandates. Each year, the provincial government makes approximately 1,500 public appointments to 184 provincial agencies and 360 other entities. In our review of the appointment process, we noted the following:

- **Significant delays in the appointment and reappointment processes in the last five years.** In our review of a sample of 1,400 new appointments in the last five years between 2012 and 2016, we found that it took on average almost 16 months to fill these vacant positions despite frequent monitoring and reporting of existing and upcoming vacancies months ahead of the end date of the outgoing members' terms. The delay in 421 of these appointments caused 33 provincial agencies to drop below their legislated minimum number of members and 163 other entities not to have legislated public representatives on their boards as required. The remaining 979 appointments, at agencies with no legislated minimum requirements, had similar delays, taking an average of 15 months to make new appointments. Board-governed agencies could have their operations impacted if they are operating below their minimum number of members prescribed in legislation, so that there may not be sufficient members to hold a quorum for meetings, or if the permanent chair position remains vacant for a long time. As well, in our review of 2,039 reappointments in the same five-year period, we found that for over 300 of them, the reappointment occurred on average more than two months

after the appointee's term had ended, with the longest delay in reappointments being over one year. As of August 2016, 165 of the 215 vacancies throughout the Province were over six months old. In addition, the majority of CEOs and appointees (including board chairs) we surveyed noted concerns with the timeliness of appointments, with almost 77% of CEOs, 54% of the chairs, and 50% of the other appointees rating the timeliness of the process as poor or very poor. Agency CEOs and chairs reported that delays in appointments have a significant negative impact on their operations. For example, they have difficulty achieving quorums for meetings; and members waiting to be reappointed cannot participate in major decisions. These delays also create a lot of uncertainty as the agencies are unable to plan future meetings or set up subcommittees of the boards until they know when members will be appointed.

- **Lack of transparency in the selection and approval process undermines its credibility.** In our survey of the appointees to agencies (including the chairs) and CEOs, 28% of the chairs, 21% of the other appointees and 54% of the CEOs rated the transparency of the appointment process as poor or very poor. They indicated that agencies and appointment candidates are not well informed of the status of appointments, and sometimes they wait months for approval decisions even when the candidates have been recommended by the agencies for appointment. In addition, only 40% of the chairs strongly agreed that there were sufficient consultation and communication between the ministry and their organization to ensure appointees have the necessary competencies to fill the gaps in their boards. Most appointments are recommended to Cabinet for approval by the minister or premier, although the appointments to adjudicative tribunals and regulatory agencies have to be recommended by the chair of these agencies.
- **Appointees to non-board-governed agencies are serving longer than the maximum term allowed by government directive.** In 2006, the government mandated that appointees to adjudicative and regulatory agencies (non-board-governed agencies) are to serve a maximum term of 10 years in the same position (for example, member, chair), unless exceptional circumstances exist to allow the appointee to serve longer. As of July 2016, 275 (or 22%) of these appointees had served for longer than 10 years in the same position. Terms longer than the maximum were meant to be an exception and only if the appointment served the public interest, such as in the case of an appointee staying to mentor and provide training to new members or in cases where there is difficulty recruiting a replacement in certain regions. While there are no maximum terms for board-governed, advisory and other agencies, 41 appointees at board-governed, 47 at advisory and 44 at other agencies have served over 10 years.
- **Appointees are able to serve on certain agencies past their term.** Forty-three agencies have enabling legislation that permits appointees to continue their duties until they are reappointed or a replacement is found. For the remaining 501 agencies, positions become vacant when members' terms expire and the new appointments or reappointments have not yet been made. This delay in new appointments or reappointments can have negative consequences for agency operations, such as lack of a quorum for decision-making. Only five of the 77 board-governed agencies have enabling legislation permitting appointees to serve past their term.
- **Agencies have 50% or more of their appointees expiring in the same year.** At 208 agencies, 50% or more of their appointees have terms ending in the same year. This adds undue stress on the process of finding the

right replacement candidates, or reappointing candidates, in a timely manner.

- **A better process is needed to ensure that provincial agencies and other entities are attracting qualified candidates.** In reviewing applications to public appointments, we noted that relatively few applicants are interested in positions at agencies in Northern Ontario. As of August 2016, 30 agencies with one or more vacancies have received less than 10 applications each; 22 of them were in Northern Ontario. Conversely, other agencies have a significant number of applicants on file, yet they still have long-standing vacancies. For example, the Citizens' Council (an advisory agency that allows citizens to provide input on the policies and priorities in Ontario's prescription drug program) has received 300 applications over the past three years, yet one of its seven unfilled positions has been vacant since April 2012. The chairs responding to our survey noted that ministries and agencies are not doing a good enough job consulting with each other to ensure that appointees have the right skills to fill the gaps at agencies.
- **Training provided by the Public Appointments Secretariat has generally been well received by the appointees.** Mandatory training of appointees by the Public Appointments Secretariat started in 2015. Board-governed agency appointees are required to take an in-class training session, and all new appointees and reappointees are required to complete an online training session. Our survey indicated that appointees were generally satisfied with the training, though 40% requested more information on the expectations of the appointee position. Our survey also found that more specific training on the agency was provided to over 90% of the respondents by the agencies.
- **Compensation is not in line with the Agencies and Appointments Directive.** Almost a quarter of appointees to board-governed and advisory agencies are compensated at per diem rates higher than the rates set out in the Directive. The difference between the rates in the Directive and the actual rates paid can be as high as $800 for an appointee. Higher rates are being separately approved by Orders-in-Council for these appointees.

This report contains six recommendations consisting of 14 recommended actions to address our findings.

OVERALL TREASURY BOARD SECRETARIAT RESPONSE

While Ontario has a well-developed public appointments process that has been used as a model for similar processes in other jurisdictions, there is room to improve and modernize Ontario's process. The input and recommendations of the Auditor General will assist Ontario in further enhancing the transparency and effectiveness of Ontario's public appointments process and help make Ontario's public appointments process an international benchmark.

2.0 Background

2.1 What Are Public Appointments?

Public appointments are appointments made by the government to positions at public entities (such as appointments to an entity's board). A public entity is an organization that was created by the government to provide, manage, or advise on public services. While created by the government, public entities generally operate at arm's length, to varying degrees. Public appointees are required to exercise a duty of care, which means they must act honestly, in good faith, and in the best interest of the public entity.

Public appointments can be made one of three ways:

- by premier's prerogative—appointments by an Order-in-Council on the recommendation of the premier;
- by minister's prerogative—appointments by an Order-in-Council on the recommendation of a minister; or
- by ministerial letter—if an organization's enabling legislation permits it, a minister may make appointments to agencies by a ministerial letter.

Appointments made by an Order-in-Council are formally approved by the Lieutenant-Governor. In some cases, the enabling legislation of the agency specifies whether these appointments are to be recommended by the premier or responsible minister, though in most cases it is at the government's discretion.

As of July 2016, a total of 3,647 individuals were serving as public appointees, appointed as shown in **Figure 1**.

2.2 What Types of Organizations Have Public Appointees?

As of July 2016, public appointees in Ontario served in 544 different organizations. About one-third of them (184) are "provincial agencies." The remaining two-thirds (360) are "other entities."

A "provincial agency" is an organization that is accountable to a government minister for achieving its mandate and most of whose appointments are made by the provincial government. Examples are Metrolinx, Infrastructure Ontario, the Ontario Labour Relations Board, and the Landlord and Tenant Board.

In contrast, an "other entity" does not have to follow the financial and administrative requirements that the Management Board of Cabinet has set for provincial agencies. They are still public entities because the government makes at least one appointment to them. Examples are the boards of governors at universities, police services boards and public health unit boards.

As **Figure 2** shows, provincial agencies are divided into board-governed agencies, non-board-governed agencies and advisory agencies. In short:

- Board-governed agencies have the authority to make operating decisions through their governing board of directors. They also have the financial and operating authority to carry on a business and conduct operations in support of the agency's mandate.
- Non-board-governed agencies lack the authority to make their own operational decisions

Figure 1: Public Appointees by Type of Appointment, July 2016

Source of data: Public Appointments Secretariat

Appointments By:	# of Appointees
Premier's prerogative	358
Minister's prerogative	2,772
Ministerial letter	517
Total	**3,647**

Figure 2: Organizations with Public Appointees, July 2016

Source of data: Public Appointments Secretariat and MyOPS Directives website

	# of Entities	# of Public Appointees
Provincial Agencies		
I. Board-Governed		
Operational Services*	37	324
Operational Enterprises*	30	284
Trust*	6	39
Regulatory*	4	41
Subtotal	**77**	**688**
II. Non-Board-Governed		
Adjudicative*	34	1159
Regulatory*	13	89
Subtotal	**47**	**1,248**
III. Advisory	60	497
Subtotal Provincial Agencies	**184**	**2,433**
Other Entities		
IV. Other Entities	360	1,214
Total	**544**	**3,647**

* This subdivision of provincial agencies is described in **Figure 3**.

and rely on their responsible ministries for operational support.

- Advisory agencies exist solely for the purpose of providing advice or recommendations to a minister or the premier (for example, the Accessibility Standards Advisory Council, the Committee to Evaluate Drugs, the Livestock Medicines Advisory Committee and the Office for Victims of Crime).

Figure 3 describes the further subdivisions of board-governed and non-board-governed agencies.

Figure 3: Further Subdivisions of Board-Governed and Non-Board-Governed Agencies

Source of data: Public Appointments Secretariat

	Primary Function	Examples
I. Board-Governed		
Operational Service Agencies	Deliver goods or services to the public (usually with no, or a minimal, fee).	• Cancer Care Ontario • Education Quality and Accountability Office • eHealth Ontario • Ontario Tourism Marketing Partnership Corporation
Operational Enterprise Agencies	Sell goods or services to the public in a commercial manner (including, but not necessarily, in competition with the private sector).	• Liquor Control Board of Ontario • Metrolinx • Niagara Parks Commission • Ontario Lottery and Gaming Corporation
Trusts	Administer funds and/or other assets for beneficiaries named under statute.	• Grain Financial Protection Board • Livestock Financial Protection Board • Ontario Public Service Pension Board • Workplace Safety and Insurance Board
Regulatory Agencies	Make independent decisions (including inspections, investigations, prosecutions, certifications, licensing and rate-setting) that limit or promote the conduct, practice, obligations, rights and responsibilities of an individual, business or corporate body.	• Alcohol and Gaming Commission of Ontario • Financial Services Commission of Ontario • Ontario Energy Board • Ontario Securities Commission
II. Non-Board-Governed		
Adjudicative Agencies	Make independent quasi-judicial decisions and resolve disputes on obligations, rights and responsibilities of an individual, business or corporate body against existing policies, regulations, and statutes, and/or hear appeals against previous decisions.	• Animal Care Review Board • Human Rights Tribunal of Ontario • Ontario Labour Relations Board • Ontario Municipal Board
Regulatory Agencies	Make independent decisions (including inspections, investigations, prosecutions, certifications, licensing and rate-setting) that limit or promote the conduct, practice, obligations, rights and responsibilities of an individual, business or corporate body.	• Advertising Review Board • Building Materials Evaluation Commission • Ontario Human Rights Commission • Public Service Commission
III. Advisory		
Advisory Agencies	Provide information and/or advice to assist in the development of programs.	• Accessibility Standards Advisory Council • Livestock Medicines Advisory Committee • Committee to Evaluate Drugs • Office for Victims of Crime
IV. Other		
Other Entities	Cannot be assigned to any of the above categories. These are organizations that are excluded from the financial and administrative requirements of the Management Board of Cabinet, but to which the government makes at least one appointment.	• University boards • College boards • Police Services boards • Ontario Trillium Foundation–Grant Review Teams

Appendix 1 breaks down the Province's 3,647 public appointees (as of July 2016) by ministry and type of entity.

For the purpose of this report, reference to agencies or organizations would refer to all provincial agencies and other entities, unless it is specifically identified as such.

2.3 What Types of Positions do Public Appointees Fill?

The types of positions that public appointees fill vary from agency to agency. They include chairs, vice-chairs, and members for all the organizations; and the presidents and chief executive officers for 12 provincial agencies (including eHealth, Ontario Clean Water Agency, and Workplace Safety and Insurance Board).

Most positions are part-time and involve meeting periodically as required by an organization's mandate. Other appointments are full-time positions, which primarily involve members appointed to the adjudicative agencies who are remunerated within the Ontario Public Service salary ranges. Whether or not a position is full-time is defined by the needs of the organization.

We noted that the basis for determining the number of appointments varies across the agencies. Some will specify (in their enabling legislation) a minimum number of appointees, while others will specify a maximum. Where a minimum is specified, it is the minister who decides what the optimal number of appointees should be. Ministry monitoring systems will then flag the cases where the number of appointments drops below the minimum required by legislation or determined by the minister.

2.4 Why Are Public Appointments Important?

Public appointees perform specific responsibilities to deliver, manage or advise on important public services on behalf of the Ontario government. For example, they serve on the board of directors of agencies such as Ontario Power Generation, which is responsible for generating almost half of Ontario's electricity, or regulatory authorities such as the Ontario Energy Board, which oversees energy pricing. They adjudicate appeals from injured workers on the Workplace Safety and Insurance Appeals Tribunal, or they decide on the compensation given to victims of violent crimes by serving on the Criminal Injuries Compensation Board.

Given the considerable impact these organizations have on the citizens of Ontario, it is crucial that appointees be qualified, that the appointments be timely, and that candidates be selected through an open and transparent process. Deficiencies or delays in the appointment process can result in significant governance issues, such as there are not enough members to form quorums for meetings (for board-governed agencies) or organizations not being able to effectively plan resources to schedule hearings (for adjudicative agencies). Also, if the appointment process seems cumbersome to observers, qualified individuals may choose not to participate in public service. Similarly, if qualified appointees go through a frustrating process in being appointed, they may choose not to renew their terms.

2.5 How Does the Public Appointment Process Work?

The Agencies and Appointments Directive (issued in 2015) sets out the policies and procedures for public appointments. These policies and procedures are intended to ensure that the most qualified people with the highest personal and professional integrity serve the public on the Province's agencies, boards and commissions. Part 3 of the Directive sets out criteria for the equitable treatment and remuneration of all government appointees who are accountable to a minister of the Government of Ontario.

The process followed for new appointments and reappointments is presented in the next subsections. We conducted research on the appointment processes in other Canadian jurisdictions and noted that the processes are quite similar across Canada. Refer to **Appendix 2** for a detailed comparison.

2.5.1 New Appointments

Figure 4 gives an overview of the public appointment process for new appointments.

Step 1: Vacant Positions are Identified and Advertised

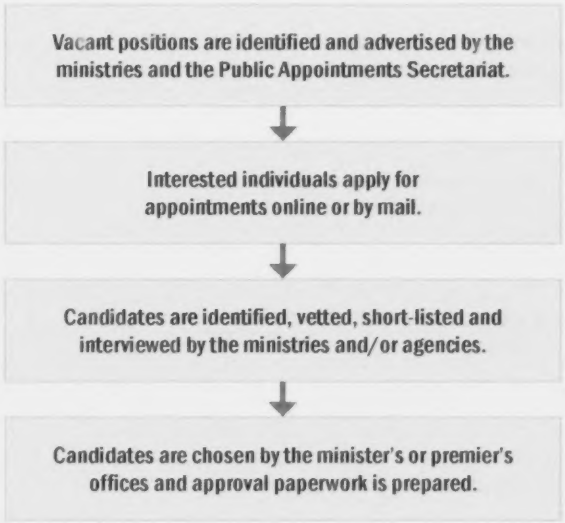
The Public Appointments Secretariat ("Secretariat") is responsible for the co-ordination and administration of the appointments process. It provides advice and support to ministries and implements policies and directives affecting appointees. The Secretariat has seven staff and reports to the Treasury Board Secretariat. It maintains a website that includes an inventory of all appointment positions. This allows it to identify vacancies. Every two months, it reports to the ministries on current vacancies and on positions that will become vacant in the next six months.

Ministries and agencies are responsible for monitoring their vacancies. Specifically, under the Agencies and Appointments Directive, ministers and deputy ministers are responsible for acting, in co-operation with the Secretariat, as the prime contact with respect to any appointments within their portfolio.

All ministers' offices have staff who are responsible for appointments. Depending on the size of the ministry and the number of appointments, a ministry may also have a dedicated appointments unit, such as the ministries of the Attorney General, Health and Long-Term Care, and Labour. Typically, it is the role of ministry staff to support the minister's office in the public appointments process. This includes monitoring vacancies and appointment expiration dates, briefing the minister's office on them, preparing appointment ads and assisting with recruitment.

Vacant positions are advertised on the Secretariat's website. These are usually chair vacancies and full-time appointments, but occasionally they also include other Ministry-advertised part-time appointments.

Figure 4: The Process for New Appointments
Source of data: Public Appointments Secretariat


Vacant positions are identified and advertised by the ministries and the Public Appointments Secretariat.
Interested individuals apply for appointments online or by mail.
Candidates are identified, vetted, short-listed and interviewed by the ministries and/or agencies.
Candidates are chosen by the minister's or premier's offices and approval paperwork is prepared.

Step 2: Interested Individuals Apply for Appointments

Any member of the public can apply for an appointment online through the website, or by mail or fax. The Secretariat provides a copy of the application to the appropriate ministry, and keeps the application on file for three years.

It is the responsibility of the ministries and agencies to review the applications for suitability of the interested candidates to their agencies and some agencies have specific eligibility requirements that must be met for certain appointments. For example, the Investment Advisory Committee of the Public Guardian and Trustee requires its members to have a minimum of 10 years' experience in investment management, institutional fund management or the financial services sector.

Step 3: Candidates are Identified, Vetted, Short-Listed and Interviewed

For most appointments, the minister's office is primarily responsible for determining the specifics of the recruitment process for the appointment, identifying candidates and vetting them to ensure

they have the necessary skills for the appointment. Depending on the appointment, either the minister's office or the premier's office is responsible for interviewing candidates. Interview panels generally consist of representation from the premier's office, minister's office, the assistant deputy minister (or deputy), and in some cases, a current chair of a comparable tribunal, agency or board, or, if possible, the outgoing chair. Interviews are required for all executive chair or chair positions.

The minister's office usually works with agency chairs in all these parts of the process.

The level of a minister's involvement in the appointments process varies from ministry to ministry. For ministries that are responsible for a large number of appointments, such as the Ministry of Health and Long-Term Care, ministry staff are more involved in supporting the selection process and recommending appointments to the minister. For ministries with fewer appointments, the minister's office is more involved in the selection process, including interviewing the potential candidates.

Adjudicative agencies, in accordance with the *Adjudicative Tribunals Accountability, Governance and Appointments Act, 2009* follow a slightly different process: the executive chair or chair of the agency (not the minister's office) identifies, vets, short-lists and interviews the candidates, and sends their list of recommended candidates to the minister for comment and final approval.

Step 4: Candidates are Chosen and Approval Paperwork is Prepared

If the premier's office/minister's office/adjudicative agency chair is satisfied after the interview that a candidate should be appointed (and all security checks and document reviews check out), approval paperwork is prepared. Different paperwork processes are followed depending on the type of appointment (as outlined earlier in **Section 2.1**).

Premier's and Minister's Prerogative Appointments

If the appointment is by the premier's prerogative, the Secretariat prepares an Order-in-Council, which the premier signs.

If the appointment is by minister's prerogative, ministry staff prepare the Order-in-Council, which the minister signs.

Orders-in-Council are technically decisions of the Executive Council (Cabinet) that take the form of "advice" to the Lieutenant-Governor. So once an Order-in-Council is signed by the minister, the Secretariat reviews it and the rest of the appointment documents, and forwards the Order-in-Council to Cabinet. It then works with the premier's office to schedule Cabinet meeting time for discussion and approval of the appointment.

If the term of the appointment is longer than a year, one more process occurs between Cabinet approval and the Lieutenant-Governor's signing of the Order-in-Council. The minister's office/ministry informs the candidate of the approval and explains that the appointment is subject to review by the Standing Committee on Government Agencies (Committee). The Secretariat then sends information on the candidate to the Committee.

The Committee has up to 14 days to decide whether or not to review a candidate. Candidates are selected for review by a subcommittee composed of a member from each political party and the chair. In the last five years (2011 to 2015), the Committee reviewed 125 out of a total of 2,014 Order-in-Council candidates, or about 6%.

If it decides to review a candidate, it has up to 30 days to complete the review (if needed, the Committee can extend this period with its members' unanimous consent). The review involves calling the candidate in for a hearing and then voting on whether or not it agrees with the appointment. The hearing allows the Committee to question the candidates on their qualifications and publicly express their opinion on the appointments, though the Committee has no veto power to block the appointment, even if it votes against it.

Once the review has been waived or completed, or the 30-day deadline for the Committee to act has passed, the Lieutenant-Governor signs the Order-in-Council. This completes the process for premier's and minister's prerogative appointments.

Ministerial Letter Appointments

If the appointment is by ministerial letter, ministry staff prepare the letter, which the minister signs. No Cabinet approval is required. The signing of the letter completes the appointment. Once the Public Appointments Secretariat receives the final letter, it publicly posts the names of the appointees on its website.

2.5.2 Reappointments

Reappointments follow the same process as new appointments except for the following:

- In step 1, once the vacancy is identified (by the Secretariat and ministry staff monitoring appointment expiration dates), the position is not advertised. There is no step 2 of candidates applying, and no step 3 of candidates being identified, vetted, short-listed and interviewed.
- Once the vacancy is identified, step 4 of preparing approval paperwork occurs (that is, the Order-in-Council or ministerial letter is prepared for signature).
- Reappointments are not subject to review by the Committee, so once the approvals are complete, the appointee is reappointed.

2.6 What Training Is Provided to Public Appointees?

Up until 2015, the Secretariat had no training program in place for public appointees and relied on agencies to provide the necessary training. In 2015, the Secretariat commenced a training and orientation program for new appointees.

Appointees to board-governed agencies are required to attend a full-day, in-class training session, as well as complete online training. Online training covers general governance topics and appointees' roles.

All other appointees are required to complete only the online training.

The Secretariat website also includes links to generic governance tools for provincial agencies. These include, for example, descriptions of different position titles that specify the purpose of the position, the key duties and the required qualifications.

The training courses and materials were prepared to give new appointees a common understanding of their role; to provide easy access to governance information and guidance; to provide consistent training to all public appointees; to increase awareness of the governance and accountability expectations and responsibilities of appointees; and to enhance communication between agencies and ministries.

2.7 Are Public Appointees Compensated for Their Time?

As mentioned in **Section 2.3**, most appointments are part-time, with full-time appointees mostly limited to adjudicative tribunals and regulatory agencies.

Full-time appointees are remunerated within the Ontario Public Service salary ranges for their services.

Part-time appointees may serve as unpaid volunteers or be compensated in ways that depend on the nature of the services they provide. These include per diems and expense reimbursement. The rates of remuneration are set out in the Agencies and Appointments Directive though, in some cases, the rates are set by Order-in-Council (as approved by the Lieutenant-Governor) on an agency by agency basis.

Because an element of public service is implied in any appointment, the compensation public appointees receive may be less than the compensation for the same type of work in the private sector.

Figure 5 shows the numbers of appointees receiving different types of compensation by type of entity.

Figure 5: Number of Appointees Receiving Different Types of Compensation, by Agency Type, as of July 2016.
Source of data: Public Appointments Secretariat

	Board-Governed				Non-Board-Governed				
Type of Compensation	Operational Service	Operational Enterprise	Trust	Regulatory	Adjudicative	Regulatory	Advisory	Other	Total
Per diem	210	137	32	14	889	67	224	294	**1,867**
Expenses	81	70					232	224	**607**
Nil[1]	20	12	1		64	2	7	223	**329**
OPS salary ranges[2]	13	35	3	1	205	19	26	18	**320**
Other[3]		30	3	26	1	1	8	455	**524**
Total	**324**	**284**	**39**	**41**	**1,159**	**89**	**497**	**1,214**	**3,647**

1. Nil means no payment, volunteer basis.
2. OPS salary ranges means appointees are remunerated within the Ontario Public Service salary ranges.
3. Other is remuneration paid by another entity such as a municipal council.

3.0 What We Looked At

The objective of our review was to assess whether effective systems and procedures are in place to ensure:

- appropriate information is publicly available regarding the appointment process in order to promote accessibility and transparency;
- vacancies are filled on a timely basis;
- individuals with the proper skills sets and competencies are matched to vacancies;
- appointees receive appropriate training and orientation;
- terms do not exceed maximum limits; and,
- compensation is within approved levels.

The objective and scope of our review was discussed with and agreed to by senior management at the Public Appointments Secretariat.

Our work was conducted primarily through the Public Appointments Secretariat between February and August 2016. We also met with the eight provincial ministries accounting for about 77% of the appointments and the clerk of the Standing Committee on Government Agencies to understand their roles in the appointment process and obtain their feedback on it.

We also sent out a survey to the chief executive officers/executive leads (executive leads head organizations, similar to the role of a CEO; both are referred to as CEOs throughout) of all the provincial agencies to solicit their views and opinions on the appointment process and its impact on the operations of their agencies. As well, we sent a survey to the chairs of all the provincial agencies and to a sample of other public appointees to get their perspective on and experience with the appointment process. We received feedback from 65 out of the 100 CEOs surveyed (65% response rate), and from 1,034 out of the 1,750 chairs and other appointees surveyed (59% response rate). The responses covered 410 out of the 544 provincial agencies and other entities.

We also researched and surveyed the public appointment processes in other Canadian provinces and the federal government for best practices.

We confirmed that the Ontario Internal Audit Division has not undertaken any work in this area.

4.0 Key Observations and Recommendations

4.1 Significant Delays in the Appointment and Reappointment Processes in the Last Five Years

Public appointees provide a wide range of important services, including overseeing police and health services, resolving labour disputes and deciding on compensation for victims of crime. In light of how important public appointees are in serving the public in these critical areas, it is essential that public appointments and reappointments be made in a timely and efficient manner.

When there are delays, operations of provincial agencies may be impeded. For instance, important or time-sensitive financial decisions do not get made if an agency's finance and audit committee chair is awaiting reappointment and cannot attend meetings in the meantime. Or a scheduled hearing on an employee's unjust dismissal complaint is delayed if an agency is waiting to have enough members appointed to meet its quorum requirement. For other entities, where the Province appoints at least one member to the boards as required by legislation, not having the legislated number of appointees on these boards means that the public interest may not be adequately represented as intended in the legislation.

The Public Appointments Secretariat monitors and reports on existing vacancies and upcoming vacancies six months in advance of their end dates. This information is communicated to the responsible ministries every two months so that they can initiate the process to either reappoint the existing members or appoint new members to the positions.

Our review of a sample of 1,400 new appointments (representing 53% of total new appointments) made in the last five years found that there were significant delays in appointing new members to the various agencies, despite frequent monitoring and reporting of existing and upcoming vacancies months ahead of the expiry of terms. We looked at 421 appointments required to fill vacant positions at 196 different provincial agencies and other entities. Of the 196 organizations, 33 were provincial agencies, where the number of appointees would drop below the legislated minimum number of appointments if the position was not filled on a timely basis (that is, these agencies would operate with fewer than their minimum number of required appointees until the positions were filled), and 163 were other entities that would not have had their required provincial representation. In addition, we looked at 979 other new appointments to replace outgoing members whose terms had ended. Delays in these appointments can negatively impact agencies' operations.

We found that it took, on average, almost 16 months to fill the 421 vacancies, which caused the number of appointees to be below the minimum number required by legislation. **Figures 6a** and **6b** show the length of time it took to fill the 421 vacant positions at agencies that were required to meet the legislated minimum number of members in the last five years and a list of the agencies with vacant positions that took over one year to fill.

For new appointments to fill positions above the minimum requirement, the Secretariat does not monitor how long it takes to fill these positions. To obtain an estimate of how long it takes, in our sample of 979 new appointments, we calculated the time interval between the end date of the outgoing appointees and the start date of the new appointees for the same agency. We found the average time was about 15 months, similar to the 16-month delay in appointments needed to meet the legislated minimum number of members. The Secretariat indicated that there could be a number of reasons for this time interval (such as that the recruitment might not start right away after the end date of the previous member, or the agency decided to postpone the recruitment of a new member); however, it does not track this information to be sure of the reasons for the time gap. As well, we found the time it took to make new appointments to

Figure 6a: Length of Time Required to Fill Vacant Positions to Meet Legislated Minimum Number of Members in the Last Five Years, 2012–2016

Source of data: Public Appointments Secretariat

Length of Time to Fill Vacancies	# of Vacant Positions by Agency Type				Total Positions Filled	
	Board-Governed	Non-Board-Governed	Advisory	Other	#	%
Under 3 months	11	3	0	51	65	16
Between 3 and 6 months	15	2	1	53	71	17
Between 6 and 9 months	4	1	4	31	40	10
Between 9 and 12 months	5	2	5	27	39	9
Between 1 and 2 years	17	3	2	85	107	25
Between 2 and 3 years	5	0	3	52	60	14
Over 3 years	1	0	1	37	39	9
Total	**58**	**11**	**16**	**336**	**421**	**100**

Figure 6b: Agencies with Vacant Positions Needing to Be Filled to Meet Legislated Minimum Number of Members That Took over One Year to Fill

Source of data: Public Appointments Secretariat

List of Provincial Agencies and Other Entities with	# of Positions	Agency Type
Vacant Positions That Took over Three Years to Fill		
Legal Aid Ontario	1 member	Board-Governed
Citizens' Council	1 member	Advisory
Board of Management – District of Nipissing East	1 member	Other
Ontario Trillium Foundation – Grant Review Teams (12 teams)	24 members	Other
Police Services Board (2)	2 members	Other
Vacant Positions That Took over Two Years but Less Than Three Years To Fill		
College of Trades Appointments Council	1 member	Board-Governed
Province of Ontario Council for the Arts (Ontario Arts Council)	1 member	Board-Governed
Provincial Schools Authority	1 vice-chair	Board-Governed
Royal Ontario Museum	2 members	Board-Governed
Citizens' Council	3 members	Advisory
Algoma University Board of Governors	1 member	Other
Ontario Trillium Foundation – Grant Review Teams (14 teams)	42 members	Other
Independent Electricity System Operator (IESO)	1 member	Other
Justices of the Peace Review Council	1 member	Other
Law Foundation of Ontario	1 member	Other
Police Services Board (5)	5 members	Other
University of Waterloo Board of Governors	1 member	Other
Vacant Positions That Took over One Year but Less Than Two Years to Fill		
Cancer Care Ontario	1 chair	Board-Governed
Local Health Integration Network – Central Local Health Integration Network	1 vice-chair	Board-Governed
Ontario Educational Communications Authority (TVO)	1 member	Board-Governed
Ontario French-Language Educational Communications Authority	3 members	Board-Governed
Province of Ontario Council for the Arts (Ontario Arts Council)	6 members	Board-Governed
Provincial Schools Authority	1 member	Board-Governed

List of Provincial Agencies and Other Entities with	# of Positions	Agency Type
Vacant Positions That Took over One Year but Less Than Two Years to Fill (continued)		
Royal Ontario Museum	4 members	Board-Governed
Environment and Land Tribunals Ontario (5 tribunals)	1 executive chair	Non-Board-Governed
Niagara Escarpment Commission	1 member	Non-Board-Governed
Ontario Police Arbitration Commission	1 member	Non-Board-Governed
Citizens' Council	2 members	Advisory
Art Gallery of Ontario	3 members	Other
Board of Management (2)	2 members	Other
Council of the Ontario College of Teachers	1 member	Other
Council of the Registered Insurance Brokers of Ontario	1 member	Other
Deputy Judges Council	2 members	Other
Ontario Trillium Foundation – Grant Review Team (12 teams)	40 members	Other
Health Unit Board – Chatham-Kent	1 member	Other
Human Resources Professionals Association	1 member	Other
Labour-Management Advisory Committee	1 member	Other
Laurentian University Board of Governors	2 members	Other
Municipal Property Assessment Corporation	3 members	Other
Police Services Boards (22)	22 members	Other
Royal Botanical Gardens	1 member	Other
Sir Sanford Fleming College of Applied Arts and Technology – Board of Governors	2 members	Other
University of Ottawa Board of Governors	1 member	Other
University of Toronto Governing Council	2 members	Other

the board-governed agencies was about 16 months, slightly higher than the average of 15 months.

In addition, we also found many instances where reappointments in Ontario in the last five years were made late. Specifically, in our sample of 2,039 reappointments (representing about 40% of reappointments made), 323 were made late—the average delay was two months after the end date of the previous appointment, and the longest delay was over a year after.

The enabling legislation of some agencies allows appointees to continue to sit on a board until they are reappointed. This is not the case at many agencies, however, and when it is not, appointees cannot participate in official board business until their reappointments are approved. Of the 323 delayed reappointments, 58 members were allowed to continue to participate in official board business, while the remaining 265 members were not. **Figure 7** shows the breakdown of the amount of time delay for the reappointment of these 265 members by agency type. For the board-governed agencies, delays in reappointments could negatively impact the governance of these agencies, as there might not be enough members to make up a quorum for meetings to review strategic planning and decision-making, impacting the operations of the agencies, or to participate in subcommittees of the boards.

In our interview with the Secretariat, we were informed that sometimes, the effective dates of reappointments on the Orders-in-Council are back-dated to the end date of the previous appointment to cover the gap period. Since the Secretariat does not track how often this is done, overdue reappointments could be underreported.

We also reviewed the list of current vacancies posted on the Secretariat website as of August 26, 2016. Out of 215 vacant positions across 102 different organizations, 165 had been vacant for

Figure 7: Time Delay in the Reappointment of Members in the Last Five Years, 2012–2016
Source of data: Public Appointments Secretariat

Amount of Time Delay in the Reappointment of Members	# of Reappointments Delayed				Total Positions Filled	
	Board-Governed	Non-Board-Governed	Advisory	Other	#	%
Under 1 month	12	14	25	26	**77**	**29**
Between 1 and 3 months	20	13	28	62	**123**	**46**
Between 3 and 6 months	6	3	16	19	**44**	**17**
Between 6 and 9 months	3	2	4	6	**15**	**6**
Between 9 and 12 months	1	2	0	2	**5**	**2**
Over 1 year	0	1	0	0	**1**	**0**
Total	**42**	**35**	**73**	**115**	**265**	**100**

over six months, with the longest-standing vacancy since April 2010. Of these vacancies, 199 were at 93 different organizations that have been operating with less than the minimum number of appointees prescribed by their enabling legislation. The most-affected agencies were the Grant Review Teams for the Ontario Trillium Foundation in 16 regions, with a total of 93 vacancies; and the Police Services Boards in 30 municipal areas, with 32 vacancies.

The Secretariat indicated that there can be difficulties in filling positions that have regional requirements (for example, those in Northern Ontario) or lower compensation levels (for example, those that are unpaid volunteer positions or only reimburse expenses). Of the 215 vacancies, 63 were in Northern Ontario (from 35 agencies) and 119 were unpaid volunteer positions or positions that only reimburse expenses (from 34 agencies).

Figure 8 shows the average amount of time (in months) that the current vacancies have been outstanding, as well as the oldest vacant position by agency type.

The CEOs and appointees (including the chairs) we surveyed also noted that the timeliness of appointments is an overwhelming concern. Some 77% of CEOs rated the timeliness of the process as poor or very poor, and almost 54% of the chairs and almost 50% of the other appointees who had gone through the process rated it as poor or very poor. A majority of the respondents also stated that overdue appointments and reappointments, leaving positions vacant, were negatively impacting their agencies' operations. This included a greater workload being shifted onto existing members, an inability to plan or schedule hearings for adjudicative agencies, and other work and decisions being put on hold.

Many surveyed CEOs and chairs expressed their frustration and concerns about these delays. For example:

- "While expiration of appointments is well known, no active effort to recruit and appoint new members is apparent, resulting in last minute ill-advised appointments."
- "It has taken a very long time for appointments to be confirmed. Long service board members have had to sit out meetings when their reappointments were delayed."
- "Incredibly slow and tardy. We are at risk repeatedly of not having quorum because appointments are delayed for months to years. Repeat emails/calls to minister's office ignored routinely."
- "We had a six-month period in 2015 with no Board because we did not have enough members appointed to be legally constituted. This was in spite of there being sufficient recommended candidates and applications with sufficient lead time to ensure the Board could continue."
- "The amount of time it takes is atrocious. We identified an ideal candidate, who was inter-

Figure 8: Number of Vacant Positions Needing to Be Filled to Meet the Legislated Minimum Number of Members, by Agency Type, August 2016
Source of data: Public Appointments Secretariat

Agency Type	# of Agencies with Vacant Positions	# of Vacant Positions	Average Time Positions Have Been Vacant (Months)	Oldest Vacant Position
Board-Governed	10	17	7	Aug 12, 2014
Non-Board-Governed	2	3	5	Jul 22, 2015
Advisory	9	21	15	Apr 16, 2012
Other	72	158	20	Apr 6, 2010
Total	**93**	**199**	**18**	

ested in being appointed, and it took nearly two years for the appointment to finally come through. It was miraculous that he was still interested by then, because people do move on in their lives."

- "New appointments have been impossible—the last new appointment was in November 2013. Reappointments (after terms of three years) have been difficult with three recent reappointments only being finalized AFTER their expiration date."
- "We have had candidates approved through a rigorous recruitment process wait more than three years for approval. This is beyond tardy—it is completely inept and an embarrassment."

RECOMMENDATION 1

To minimize the negative impact of delays of appointments on the operations of the provincial agencies and the lack of provincial representation on the boards of other entities, the Treasury Board Secretariat, in conjunction with the ministries, should ensure:

- the appointments of new members and reappointments of existing members are done in a timely manner (where appropriate, defining the time allowed for each step of the appointment process); and
- all provincial agencies have at least the minimum number of members in order to conduct business, and other entities have sufficient provincial representation as dictated by their enabling legislation or as identified by the ministry/agency if no minimum is set in legislation.

TREASURY BOARD SECRETARIAT RESPONSE

The Treasury Board Secretariat will establish "best practice guidance" regarding timelines related to those steps of the appointment process that are overseen by Ministry staff.

The Treasury Board Secretariat will develop educative and "best practice guidance" materials to help Ministry staff who participate in the public appointments process understand the benefits and importance of timely appointments and reappointments to provincial agencies.

4.2 Lack of Transparency in the Appointments Process Undermines the Credibility of the Process

Just as the appointment process needs to be timely to ensure that the public continues to be served in critical areas, it also needs to have open, transparent

and thorough selection procedures based on merit. Candidates should be evaluated based on their qualifications, experience and fit against the needs of the organization. Board chairs should always be involved (excluding appointments to the 360 other entities where generally a minority of members are public appointees) given their knowledge and understanding of their agency's requirements.

As well, the range of skills and background sought and the expectations for the role should be clearly detailed to ensure that candidates are fully aware of the criteria their evaluation will be based on. Candidates should also be required to disclose potential conflicts of interest, and these should be adequately considered when candidates are evaluated. All candidates short-listed for potential appointments are required to submit a Personal and Conflict of Interest Disclosure Statement.

We noted that the federal government's appointment process requires that selection criteria be published for all positions. This is generally not done in Ontario, as the Secretariat's website only lists the vacancies and does not publish the selection criteria for the positions. In some cases, agencies list position requirements on the Secretariat's website.

Many of the CEOs and appointees (including chairs) we surveyed were concerned about the transparency of the appointment process. Some 28% of chairs, 21% of other appointees and 54% of CEOs rated the transparency of the process as poor or very poor. They found the process to have long periods of no communication on the progress of the appointments. This lack of communication has created considerable frustration and uncertainty among appointees about how candidate selection takes place.

In addition, only 40% of chairs strongly agreed that there were sufficient consultation and communication between the government/ministry and their organizations to ensure appointees have the necessary competencies to fill the gaps in their boards.

Many survey respondents expressed their concerns about the lack of transparency. For example:

- "Lack of clarity up front by the Province as to characteristics, competencies that are desirable. Lack of transparency. Second-guessing board decisions despite rigorous recruitment. Inability to think ahead and plan for retirements and term expirations. Management by crisis, which leads to a fundamental problem of governance with no trustees, no institutional knowledge or memory, no continuity and no clarity around timeline and process."
- "Explanations of why certain applicants are screened out at the Secretariat or minister's office are not clear—usually we are told that the candidate has a conflict of interest—but will not be clear on what that might be—even in cases where we have reviewed the candidates and don't see any COI [conflict of interest]. The feedback from the Secretariat to the unsuccessful candidates… is almost nonexistent and they contact us for explanations, which we don't have—so [cannot] provide."
- "The most qualified are not always selected for reasons that are not obvious."
- "No dialogue regarding why certain candidates were selected and others rejected. A complete lack of explanation why the approvals take so long."
- "There is no transparency in the appointment process… often very worthwhile candidates do not make it through this initial screening for reasons that 'cannot be identified.'"
- "Agency is unaware of who is being considered for board appointment, or selection criteria being applied. Agency is not consulted about gaps in skills or expertise. Individuals who applied through online process report months/years of inactivity and lack of communication."
- "It is a complete black hole. The steps required for approval are unclear, the status is never clear, there is never any proactive communication, decisions are arbitrary and random."
- "The process is almost always delayed once the recommendation leaves our office. There is no

way to predict how long the process will take, which has a negative impact on the Board's business as well as the applicant. It can take up to seven or eight months for an OIC [Order-in-Council] to be approved and signed. Despite requests, the Board is refused updates as to where the application is in the process and when we might expect a new [appointment] to be approved. This makes it impossible to plan for a tribunal that schedules hearings every day of the week, many on an expedited basis."

Overall, a majority of the chairs and CEOs responding to our survey said they felt member vacancies are being filled with qualified individuals. However, some of them also felt that there is not enough consultation between the ministry and their organization to ensure that appointees have the qualifications necessary to fill the gaps in their boards. Two notable comments made about the lack of qualified members were:

- "...there is nothing by which to measure whether or not any candidate is a suitable choice. The issue for the Agency in the absence of any such appropriate vetting is that we often end up with well-meaning but under-qualified persons who (by no fault of their own) [are] not equipped to hold the Agency accountable."
- "Lack of transparency on holding back by the Ministry of applications submitted in response to competitions. Agency is advised it is the result of vetting for basic qualifications but it is clear this is not the case. Agency is often asked to consider specific candidates (who either did or did not apply) at the request of the Minister's office."

RECOMMENDATION 2

To maintain a transparent and credible appointments process, the Treasury Board Secretariat, in conjunction with the ministries, should work with the ministers' and premier's offices to ensure:

- there is clear communication with the agencies on the selection process used to evaluate the candidates' qualifications, experience and fit against the needs of the agencies, including publishing the selection criteria used to evaluate the candidates, where appropriate;
- chairs, in conjunction with CEOs, are consulted for their input on board requirements so that appointed board members have the competencies to fill the gaps in their boards; and
- agencies are promptly and clearly informed of the status of position vacancies being filled to facilitate planning at the agencies.

TREASURY BOARD SECRETARIAT RESPONSE

The Treasury Board Secretariat will work with ministries to educate both chairs and ministers' offices regarding the benefits and importance of the candidate selection process and, where appropriate, of engaging chairs and CEOs in that process.

The Treasury Board Secretariat will continue to provide a bi-monthly report outlining appointment vacancies to facilitate appointment planning in ministries. Where appropriate, the Treasury Board Secretariat will also supplement the regular vacancy list provided to all ministries with periodic communications to ministries enquiring about the status of appointees whose terms have expired and encouraging ministries to address the vacancies.

The Treasury Board Secretariat will continue the work it began in early 2016 to modernize relationship-management practices between ministries and their provincial agencies.

4.3 Terms of Appointments May Not Be Effective for Proper Governance

Appointments are generally for a "fixed term" (that is, for a set number of years) and "at pleasure" (meaning that, although the appointment is for a set number of years, it can be revoked at any time, without cause and without giving notice). Other than appointments to adjudicative tribunals and regulatory agencies, most appointments are at pleasure.

Terms of appointments are fixed to benefit organizations, with the turnover of appointees helping to ensure a diversity of perspectives. Fixing appointment terms also ensures that other qualified individuals have opportunities for public service. Terms should also be staggered to ensure proper continuity of operations and training of new members.

The Agencies and Appointments Directive has guidelines for the terms of appointments. The maximum fixed term for appointments to adjudicative tribunals and regulatory agencies (including reappointments) is 10 years for a given position. Only in exceptional circumstances can this maximum be exceeded: the reason has to be in the public interest in the judgment of the appointing authority. In most other cases, such as board governed agencies, the term of an appointment must not exceed three years, with unlimited further reappointments allowed (each of which may not exceed three years).

While the Agencies and Appointments Directive does not include any guidance on staggering the terms of appointees, it is considered best practice (in Ontario and other jurisdictions) that, where possible, terms of appointments do not all end in the same year. This is important because it enables the agency to maintain board continuity (such as maintaining a quorum and implementing plans) and the ministries and Secretariat to focus on recruiting candidates with the required skill sets each year.

4.3.1 Twenty-Two Percent of All Appointees to Non-Board-Governed Agencies Have Served Longer Than the Maximum Term Allowed

In 2006, the Province standardized the appointment and reappointment terms for non-board-governed agencies. The maximum total service time was capped at 10 years for a given position (for example, appointee, vice-chair or chair), with extensions to that position granted only for exceptional circumstances. Yet as of July 2016, there were 275 appointees (or 22%) to non-board-governed agencies who had served more than 10 years in the same position, as shown in **Figure 9**. In total, 318 individuals had served more than 10 years, representing 25% of total appointees at non-board-governed agencies. In addition, we noted that 13 appointees had served more than 30

Figure 9: Number of Appointees Serving Longer Than 10 Years by Agency Type, as of July 2016
Source of data: Public Appointments Secretariat

Agency Type	# of Agencies with Appointees Serving Longer Than 10 Years	# of Appointees Serving Longer Than 10 Years	Total # of Appointees	% of Appointees Serving Longer Than 10 Years	Average Term of Service (Years)	Longest Term (Years)
Board-Governed	20	41	681	6	13	28
Non-Board-Governed*	30	275	1,255	22	16	48
Advisory	21	47	497	9	13	25
Other	34	44	1,214	4	13	32
Total	**105**	**407**	**3,647**	**11**	**15**	

* These numbers represent appointees serving >10 years in the same position. The total number of appointees serving >10 years is 318, representing 25% of total appointees, with an average term of 16 years of service.

years, with the longest serving 48 years. The agencies in these situations face a potential loss of a very high number of experienced appointees in a short period of time, as agencies are required to meet the 10-year limit and will therefore need to recruit and train new appointees to ensure proper operations.

The five non-board-governed agencies with the most number of appointees serving for more than 10 years in the same role are:

- **Ontario Review Board** (makes or reviews the settlement of criminal cases for individuals found unfit to stand trial or not criminally responsible by reason of mental disorder)—79 out of 161 appointees, or 49%.
- **Consent and Capacity Board** (reviews patients' capacity to consent to admission and treatment in a psychiatric facility)—41 out of 146 appointees, or 28%.
- **Workplace Safety and Insurance Appeals Tribunal** (hears appeals from workers and employers on rulings by the Workplace Safety Insurance Board on entitlements to benefits and health care)—35 out of 89 appointees, or 39%.
- **Grievance Settlement Board** (adjudicates rights disputes between Crown employers and employee unions/bargaining agents)—21 out of 35 appointees, or 60%.
- **Ontario Labour Relations Board** (administers the Labour Relations Act and other statutes involving employer-employee rights or interactions)—17 out of 59 appointees, or 29%.

The reasons chairs have given for requesting some of their members' terms be extended beyond the 10-year limit are:

- The long-serving member needs to stay to mentor and provide training to new members coming on board (who will be appointed shortly, as recruitment is under way).
- The long-serving member has a professional designation required by legislation (for example, is a psychiatrist or lawyer), and it may be difficult to recruit a replacement in certain regions.
- The long-serving member is an experienced bilingual adjudicator with the ability to hold hearings in French; again, it may be difficult to find a replacement.
- The long-serving member has the needed experience to help reduce a backlog of complex cases for adjudication.

As mentioned in **Section 4.3**, there is no limit on reappointments for board-governed, advisory and other agencies, though these agencies have fewer instances of appointees serving more than 10 years—132 out of the 2,358 (6%) appointees had served more than 10 years as of July 2016. An additional 43 appointees will exceed 10 years' service before the end of their current appointment term. In most of these instances, the reappointments are made for the same reason as the adjudicative and regulatory agencies: the appointee has specific skills required for the role, and the board has trouble attracting new appointees with those skills.

One of the main concerns that the chairs and appointees we surveyed had about appointment terms was this 10-year limit. Forcing appointees to stop serving at 10 years could cause boards to experience significant loss of knowledge and continuity, especially if agencies do not have effective transition processes to enable experienced members to transfer their knowledge to incoming members. However, the 10-year limit is intended to ensure regular membership renewal on the government's adjudicative tribunals and regulatory agencies, to foster a diversity of perspective and provide other qualified individuals with the opportunity to serve.

In addition, we noted that 34 appointments were open-ended at 17 agencies (four board-governed, five advisory and eight other entities), with no end date. Such appointments are allowed in the enabling legislation of certain agencies. For example, members of the Soldier's Aid Commission, which helps take care of and find employment for Canadian military members returning from service, serve until they are replaced or their appointment is revoked. Others include three members of the Advisory Council of the Order of Ontario (the

Chief Justice of Ontario, Speaker of the Legislative Assembly and Secretary of Cabinet) who serve for the tenure of their designated positions, and members on boards of agencies (such as Ontario Power Generation) who are reappointed annually.

Most other jurisdictions in Canada have maximum appointment terms. These are usually set out in legislation. For example, appointees to public agencies subject to the *Alberta Public Agencies Governance Act*, serve a maximum of 12 years (if the agency is adjudicative or regulatory) and a maximum of 10 years (for all other agencies).

4.3.2 Some Appointees Have Been Serving Past Their Term's Expiry Date

As of July 2016, 180 of the 3,647 appointees listed as current members are past their term's expiry date due to delays in either appointing new members or reappointing the existing members. In a few cases, an agency's legislation allows for an appointee to continue to serve past their term until a replacement is approved. When legislation does not allow for this, appointees serving past their term would not be allowed to officially participate in board discussions or decisions, making their continued service virtually ineffectual. Overall, there are 43 agencies (five board-governed, two non-board-governed and 36 other entities) that have enabling legislation that allows members to serve past their term expiry date.

Of the 180 appointees on expired terms (at 103 agencies), we found that 19 appointees (at eight agencies) were allowed to serve until a replacement was found, 26 (at 16 agencies) subsequently had their terms extended, 10 (at four agencies) were in the process of being reappointed, and 32 (at 25 agencies) had resigned and not sought reappointment. The Secretariat informed us that it was awaiting notification from ministries as to whether the remaining 93 appointees on expired terms would be reappointed or end their service.

If an appointee retires or resigns, they continue to be listed as a current member on the Secretariat's website until Cabinet revokes their Order-in-Council, which can take time depending on when Cabinet is sitting. The Secretariat relies on the ministries to provide them with notification when appointees' terms expire or they have resigned, to update its records of all appointees in the Province.

4.3.3 Some Agencies Will Have More Than Half of Their Appointees' Terms Expiring in the Same Year

As of July 2016, there were a significant number of agencies with more than 50% of their members' terms expiring in the same year. Any delays in appointments for these agencies could result in vacancies, with all the negative outcomes they entail (for example, quorums not being met and implementation of plans being delayed). Even if new appointees begin serving in time to avoid a vacancy, their inexperience and lack of knowledge coming in causes challenges to the effective functioning of boards.

Within the next five years, there will be 208 agencies (with more than two provincial appointees) with 50% or more of their appointees' terms expiring in the same year. Of these, 101 are provincial agencies (44 are board-governed agencies, 18 are non-board-governed and 39 are advisory) and 107 are other entities. The challenges caused by multiple appointees' terms expiring in the same year will be particularly felt by board-governed agencies, where the government appoints all appointees and the agencies act on the government's directions.

Figure 10a shows the number of agencies with more than 50% of the appointees' terms ending in the same year. **Figure 10b** shows, in the next few years, that the terms of many appointees at board-governed agencies will expire in the same year.

We noted that the enabling legislation of some federal agencies requires that appointees' terms be staggered. The federal equivalent of the Secretariat told us that, for agencies without such a requirement, it encourages ministers to adopt staggered appointee terms as a best practice to ensure the continued effectiveness of agency operations.

Figure 10a: Number of Agencies with 50% or More of Their Appointees' Terms Ending in the Same Year, as of July 2016.

Source of data: Public Appointments Secretariat

Agency Type	Agencies with >50% Appointees with Expired Terms on the Same Year*	Total # of Agencies	% of Agencies with >50% of Appointees Ending in the Same Year*
Board-Governed	44	77	57
Non-Board-Governed	18	47	38
Advisory	39	60	65
Other	107	360	30
Total	**208**	**544**	**38**

* Only review agencies with more than two appointees.

Figure 10b: Board-Governed Agencies with 50% or More of Their Members' Terms Ending in the Same Year, as of July 2016.

Source of data: Public Appointments Secretariat

Board-Governed Agency	Year of Term Expiry	Total # of Appointees	Appointees Whose Terms Expire in the Same Year	% of Board Members Whose Terms Expire in the Same Year
Ontario Retirement Pension Plan Administration Corporation	2016	3	3	100
College Of Trades Appointments Council		8	6	75
St. Lawrence Parks Commission		6	4	67
Metropolitan Toronto Convention Centre Corporation		8	5	63
Niagara Parks Commission		12	7	58
Alcohol and Gaming Commission of Ontario		7	4	53
Science North (Centre)		15	8	53
Ottawa Convention Centre Corporation		8	4	50
Deposit Insurance Corporation of Ontario	2017	8	8	100
Ontario Capital Growth Corporation		4	4	100
Ontario Mortgage and Housing Corporation		5	5	100
Owen Sound Transportation Commission		5	5	100
Toronto Islands Residential Community Trust Corporation		6	6	100
Ontario Place Corporation		7	6	86
Local Health Integration Network – Toronto Central		6	5	83
Ontario Lottery and Gaming Corporation		12	9	75
Ontario Financing Authority		15	11	73
Ontario Securities Commission		14	10	71
Local Health Integration Network – Central East		7	5	71
Human Rights Legal Support Centre		6	4	67
Local Health Integration Network – Erie St. Clair		6	4	67
Local Health Integration Network – Mississauga Halton		9	6	67
Ontario Electricity Financial Corporation		9	6	67
Ontario Energy Board		11	7	64

Board-Governed Agency	Year of Term Expiry	Total # of Appointees	Appointees Whose Terms Expire in the Same Year	% of Board Members Whose Terms Expire in the Same Year
Provincial Schools Authority	2017	5	3	60
Grain Financial Protection Board	cont'd	7	4	57
Local Health Integration Network – North Simcoe Muskoka		7	4	57
Local Health Integration Network – Central Local		9	5	56
Walkerton Clean Water Centre		9	5	56
Ontario Infrastructure and Lands Corporation (Infrastructure Ontario)		13	7	54
Ontario Health Quality Council (Health Quality Ontario)		12	6	50
Local Health Integration Network – Central West		8	4	50
Trillium Gift of Life Network		14	7	50
Ontario Mental Health Foundation		8	4	50
Ontario Northlands Transportation Commission	2018	6	6	100
Ontario Immigrant Investor Corporation		3	3	100
Local Health Integration Network – South East		6	5	83
Ontario Heritage Trust	2018	13	9	69
Livestock Financial Protection Board		7	4	57
Agricorp		11	6	55
Local Health Integration Network – North West		8	4	50
Ontario French-Language Educational Communications Authority		8	4	50
Ontario Media Development Corporation	2019	12	6	50
Nawiinginokiima Forest Management Corporation		8	4	50

RECOMMENDATION 3

To maximize the effectiveness of provincial agencies and other entities serving the public, the Treasury Board Secretariat, in conjunction with the ministries, should work with the provincial agencies to:

- support the transition of members who have served over the 10-year maximum term to new members and take steps to minimize any negative impact on the operations of the agencies;
- ensure timely communication between the ministries and the Secretariat on the status of members on expired term to ensure its record of all appointees in Ontario is up-to-date; and
- stagger the terms of appointees serving at the same agency.

TREASURY BOARD SECRETARIAT RESPONSE

The Treasury Board Secretariat will continue to make the Public Appointments Secretariat website available to ministries to assist with recruitment for adjudicative agencies as they work to comply with the 10-year term maximum. In September 2016 the Treasury Board Secretariat developed and distributed to all ministries guidance and direction regarding the utilization of external advertising to support the public appointments process.

The Treasury Board Secretariat will supplement the regular vacancy list provided to all ministries with periodic communications to ministries enquiring about the status of appointees whose terms have expired.

The Treasury Board Secretariat will work with ministries to educate both chairs and ministers' offices regarding the benefits and importance of staggering appointee terms to ensure improved governance continuity on provincial agency boards.

The Treasury Board Secretariat will review and revise, as appropriate, its current Succession Planning Guide for provincial agencies in order to provide further assistance and guidance to provincial agency chairs.

4.4 Process to Attract Qualified Candidates Needs Improvement

The key skills, abilities and expertise appointees need to effectively fulfill their roles vary across agencies. For example, some roles require specialized knowledge of a subject, such as employment and labour relations law, while others require community-based knowledge about the areas the agencies serve.

Some requirements are specified in an agency's legislation. For example, the Ontario Review Board's legislation requires that the chair be a currently serving or retired judge, or have the qualifications of a judge. The board usually sits in panels of five members: the chair (or an alternate chair selected by the chair), one lawyer, two psychiatrists and one public member.

As well, the *Adjudicative Tribunals Accountability, Governance and Appointments Act, 2009* specifically requires that the selection process for members of an adjudicative tribunal be competitive and merit-based, and that the criteria to assess candidates include experience, knowledge and training in the subject matter and legal issues being dealt with by the tribunal. There is also a requirement that no person be appointed or re-appointed unless the chair of the tribunal recommends that person.

We reviewed the number of applications that the Secretariat has received by agency and noted that there seems to be a chronic shortfall of applicants interested in positions at agencies in Northern Ontario. For example, in the last five years in the Province overall, 30 agencies with one or more vacancies have received less than 10 applications each; 22 of them were in Northern Ontario.

On the other hand, there are other agencies that have a significant number of applicants on file, yet vacant positions at these agencies still remain unfilled for long periods. For example:

- The average number of applications for a position on a Grant Review Team for the Ontario Trillium Foundation is 65. The Grant Review Team for the Toronto area had over 260 applications for one vacancy. Yet on the August 2016 list of overall public appointment vacancies, the Grant Review Teams had the highest number of vacancies and the longest-standing vacancies of all the organizations on the list.
- The Citizens' Council (an advisory agency that allows citizens to provide input on the policies and priorities in Ontario's prescription drug program) has received 300 applications over the past three years. Yet it has seven vacancies, the oldest of which became vacant in April 2012.
- The Royal Ontario Museum has received over 220 applications over the past three years. Yet it currently has five vacancies, the oldest of which dates to February 2016.

In all cases, the Secretariat does not review the applications it receives to assess the suitability of the applicant to the needs of the agency; instead, the Secretariat simply forwards the applications to the responsible ministry to track them and refer to them for their vacancies. In June 2016, the Ontario government announced gender diversity targets for provincial agencies. The government has targeted that, by 2019, women make up 40% of all appointments to provincial boards and agencies. Although the Secretariat's appointees database has the information needed to track the Province's progress in

achieving the target, the Secretariat had not started to do so at the time of our review.

In comparison, the City of Toronto currently shows its diversity statistics as a key component of its public appointments website.

As well, within the last year, the federal government has implemented a new approach for Governor-in-Council appointments. The appointments will be:

- advertised on a website and in national media;
- representative of Canada's diversity (ministers' recommendations will take into consideration gender parity and reflect Canada's diversity); and
- merit-based.

RECOMMENDATION 4

To ensure that qualified candidates are appointed to provincial agencies and other entities, the Treasury Board Secretariat, working with the ministries, should:

- proactively promote vacant positions in Northern Ontario to attract qualified candidates;
- assess the need to prioritize and fill long-standing vacant positions, particularly if those positions have been outstanding for a number of years; and
- monitor appointment diversity statistics and post them on its public website.

TREASURY BOARD SECRETARIAT RESPONSE

The Treasury Board Secretariat will continue to improve the government's outreach strategies to see that provincial agency boards continue to reflect the face of Ontario.

In September 2016, the Treasury Board Secretariat developed and distributed to all ministries guidance and direction regarding the utilization of external advertising to support the public appointments process.

The Treasury Board Secretariat will continue to provide a bi-monthly report outlining appointment vacancies to facilitate appointment planning in ministries.

Where appropriate, the Treasury Board Secretariat will also supplement the regular vacancy list provided to all ministries with periodic communications to ministries enquiring about the status of appointees whose terms have expired and encouraging ministries to address the vacancies.

The government has publicly committed to achieving a target of 40% women appointees on all provincial agencies by 2019. As part of delivering on that commitment, the Treasury Board Secretariat will monitor diversity statistics regarding appointees to provincial agencies.

4.5 Training Provided by the Public Appointments Secretariat Has Been Generally Well Received by the Appointees

Both the in-class training and the online training that the Public Appointments Secretariat provides focus on the principles of good public-sector governance, provide background information on the government, and explain the roles and responsibilities of public appointees. As of July 2016, 17 in-class sessions were provided to a total of 265 appointees, and 1,100 appointees completed the online training.

Appointees were asked to provide feedback on the training by answering a survey. We reviewed the surveys summary and found that, overall, the feedback was favourable: over 90% of respondents rated the training as good or excellent. The results of our own survey were similar: over 80% of appointees said the training was good or excellent. When it came to suggesting improvements for the orientation and training process, about half of the respondents requested more information regarding the general overview of expectations for appointee

positions. Other areas identified include the relationship and communication between the agencies and the provincial ministries, and best practices/common requirements applicable to the various types of roles.

The Secretariat tracks the appointees' training to determine whether they have completed the online and/or in-class training. As of July 2016, out of over 1,400 appointments that were required to take the online training, 1,115 completed the training (about 80%). In addition, out of 450 appointments that were required to take the in-class training, 310 completed it (about 70%). The Secretariat sends reminders when training has not yet been completed and when the next in-class session is available (where applicable). As expected, given the convenience of online training (available to be taken at any time as compared with in-class training offered just once a month), the online training reports better attendance than the in-class training. Although there is no required timeline to complete the training, the Secretariat does encourage appointees to complete the training as soon as possible. A majority of the appointees who have not taken the training were appointed in the last year.

Ontario and Manitoba are the only two jurisdictions that require new appointees to take mandatory training centrally. The federal government, Saskatchewan and Quebec also offer training centrally but it is not mandatory. Alberta is working on developing centrally offered government training for all new appointees that will be similar to the training Ontario offers.

Almost every CEO surveyed stated that their organization provides new appointees with an orientation pertaining to their organization's mandate and operations. About 90% of appointees responded that they received this training when they were appointed to their positions.

RECOMMENDATION 5

To ensure its public appointees are sufficiently trained to effectively perform their roles, the Treasury Board Secretariat should:

- review its training materials to enhance areas for improvement identified by public appointees, specifically relating to their expected roles and responsibilities, the relationship and communication between the agencies and the provincial ministries, and best practices/common requirements applicable to the various types of roles; and
- in conjunction with ministries ensure appointees complete their training requirements as part of their appointment in a timely manner.

TREASURY BOARD SECRETARIAT RESPONSE

The Treasury Board Secretariat will review and work to continually enhance and improve appointee training materials, and will work with ministries to have appointees complete the required training in a timely manner.

4.6 Compensation Is Not in Line with the Agencies and Appointments Directive

While the Agencies and Appointments Directive does not specifically require that appointees be compensated, it does set out maximum per diem and remuneration rates for the ministries that decide to compensate their appointees and/or reimburse their expenses.

According to the Directive, the per diem rates for board-governed and advisory agencies are split into two levels, Basic and Specific Expertise, and they must be within the following ranges:

- members: up to $150 (Basic) and $200 (Specific Expertise);

- vice-chairs: up to $175 (Basic) and $250 (Specific Expertise); and
- chairs: up to $225 (Basic) and $350 (Specific Expertise).

The Directive also states that Treasury Board/Management Board of Cabinet is responsible for granting exceptions to any per diem rates and full-time remuneration in excess of those prescribed in the Directive.

In our review of the compensation rates for current members, we found almost a quarter of appointees to board-governed and advisory agencies (140 of 606, or 23%) are being compensated using per diem rates that are higher than the rates set out in the Directive. These appointees are on the boards of eight board-governed and seven advisory agencies across seven ministries. The average difference between the maximum per diem rate and the actual was about $200, and the highest is with the members on the Committee to Evaluate Drugs, whose remuneration rate is $800 more per day than the amounts outlined in the Directive.

The compensation rates for these 140 members were approved by Treasury Board/Management Board of Cabinet. Each agency has a remuneration Order-in-Council signed by the Lieutenant-Governor. Treasury Board/Management Board of Cabinet decisions take precedence over the rates set out in the Directive. However, the purpose of the Agencies and Appointments Directive is to set out the rules and requirements for appointments and remuneration. If the Directive does not reflect the actual remuneration for the agencies, then the Directive is not providing the correct information to potential appointees.

In contrast, less than 1% of appointees to adjudicative tribunals and regulatory agencies (six of 959, all appointed to the Public Accountants Council for the Province of Ontario—the agency responsible for overseeing public accounting in Ontario) are being remunerated at a higher rate than the Directive allows. These rates were approved by an Order-in-Council signed by the Lieutenant-Governor.

RECOMMENDATION 6

To ensure that compensation to appointees is transparent, provincial agencies should adhere to the compensation rates outlined in the Agencies and Appointments Directive or, as needed, the Treasury Board Secretariat should propose to the Treasury Board/Management Board of Cabinet that the Directive be amended to indicate the compensation actually in effect.

TREASURY BOARD SECRETARIAT RESPONSE

The Treasury Board Secretariat will continue to recommend compensation rates consistent with the Directive as new provincial agencies are established, while also respecting the Treasury Board/Management Board of Cabinet's authority to make compensation decisions on behalf of the government.

Appendix 1: Public Appointees by Ministry and Type of Agency, July 2016

Source of data: Public Appointments Secretariat

	Board-Governed				Non-Board-Governed				
Ministry	**Operational Service**	**Operational Enterprise**	**Trust**	**Regulatory**	**Adjudicative**	**Regulatory**	**Advisory**	**Other**	**Total**
Accessibility Directorate of Ontario							13		**13**
Advanced Education and Skill Development	7						13	177	**197**
Agriculture, Food and Rural Affairs	7	17	14	7	50	8	32	5	**140**
Attorney General	17			7	480[1]	21	63	53	**161**
Children and Youth Services		3					17		**17**
Citizenship and Immigration	8					1	20		**24**
Community and Social Services								7	**15**
Community Safety and Correctional Services	14	17			5		63	239[2]	**68**
Education							30	32	**93**
Energy	9	13		11				41	**52**
Finance		50	3	16			53	29	**104**
Francophone Affairs						9	3	21	**102**
Government and Consumer Services							11		**11**
Health and Long-term Care	185					6		25	**31**
Housing		5			415[3]		71	286[3]	**671**
Infrastructure		13						1	**6**
Labour	10		10					4	**17**
Municipal Affairs		6			194	1	10	11	**236**
Natural Resources and Forestry		18			10	12	21	24	**73**
Northern Development and Mines	17	11				16	61	16	**111**
Research, Innovation and Science		4						3	**31**
Seniors' Secretariat		4					11		**15**
Tourism, Culture and Sport	50	111							**4**
Transportation		16						218[4]	**161**
Treasury Board Secretariat			12			1		14	**31**
Total	**324**	**284**	**39**	**41**	**1,159**	**89**	**497**	**1,214**	**3,647**

1. Mostly composed of appointees on environment and land and social justice tribunals.
2. Mostly composed of appointees on police service boards.
3. Mostly composed of appointees on regulated health sector councils and consent and review boards.
4. Mostly composed of appointees on the Grant Review Teams for the Ontario Trillium Foundation.

Appendix 2: Interjurisdictional Comparison

Prepared by the Office of the Auditor General of Ontario

	ON	CAN	BC	AB	SK	MB	QC	NB	NS	PEI	NF	NWT	YK	NU
Does one centralized organization perform most administrative activities of the public appointments process?	Yes	Yes	Yes	No	Yes	Yes	Yes	No	No	Yes	Yes	No	No	No
Are the administrative policies governing the process centralized?	Yes	Yes	Yes	Yes	No	Yes	Yes	No	Yes	Yes	Yes	No	Yes	No
Is a central database to track appointees and terms maintained?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
When does the appointment process usually start?	Between 2 and 6 months prior	Depends on agency	More than 6 months prior	More than 6 months prior	More than 6 months prior	More than 6 months prior	More than 6 months prior	More than 6 months prior	Between 2 and 6 months prior	Less than 2 months prior and after term ended	Depends on agency	Less than 2 months prior	Between 2 and 6 months prior	Less than 6 months prior
What is the typical time period from identification of vacancy to placement of appointee?	Greater than 6 months	Greater than 6 months	Between 2 and 6 months	Greater than 6 months	Between 2 and 6 months	Between 2 and 6 months	Between 2 and 6 months	Greater than 6 months	Greater than 6 months	Between 2 and 6 months	Between 2 and 6 months	Less than 2 months	Between 2 and 6 months	Between 2 and 6 months
What is the typical term length for an appointment?	3 years (except for adjudicative and regulatory agencies)	Depends on legislative provisions	Usually 1 year but depends on legislative provisions	3 years	Depends on legislative provisions	Usually 2 or 3 years	5 years	3 years	3 years	3 years	3–5 years	3 years	3 years	3 years
Do reappointments follow the same process as appointments?	No	No	No	No	Yes	Yes	Sometimes	Yes	Yes	No	No	Yes	No	Yes

	ON	CAN	BC	AB	SK	MB	QC	NB	NS	PEI	NF	NWT	YK	NU
Are there limits on the number of terms appointees can serve?	Depends on agency	Yes	Depends on legislative provisions	Yes	No	Yes, typically 10 years	Yes	Yes	Yes	Yes	Yes	Yes	No	No
Are appointment terms typically staggered to ensure a large proportion of appointees are not replaced at the same time?	Sometimes	Yes	Yes	Sometimes	Sometimes	Yes	Sometimes	Sometimes	Sometimes	Yes	Sometimes	Sometimes	Sometimes	Yes
Do documented competencies exist for all appointment positions regarding applicants' required skill sets?	Yes	Yes	Yes	No	Yes	No	No	No	No	No	Yes	No	No	No
Is there compensation for all appointed positions?	No	No	No	No	Yes	No	Yes	No	No	No	No	No	No	Yes
If per diems are provided, what is the range?	$75–$1,000*	Depends on agency and position	Depends on agency	Depends on agency	Depends on agency	$55–$560	$100–$400	Up to $500	$35–$1,000	$73–$200	Depends on agency	$250–$500	$75–$200	$250–$500
Are new appointees provided with orientation and training centrally or at the entity level?	Both	Both	Entity level	Entity level	Both	Both	Both	Entity level	Entity level	Entity level	Entity level	No	Entity level	No
Is training mandatory?	Yes centrally	Yes at Entity level	Yes at Entity level	No	No	Yes centrally	No	No	Yes at Entity level	No	No	No	No	No
Does your jurisdiction have a standing committee of the legislature which is empowered to review intended appointees?	Yes	Yes	No	No	Yes	Yes	No	No	Yes	No	Yes	No	Yes	No

* One exception for the Nominating Committee for the Board of Ontario's Retirement Pension Plan Administration Corporation at $1,500.

Chapter 4
Section
4.03

Information and Information Technology General Controls

1.0 Executive Summary

The Ontario government relies on information and information technology (I&IT) to deliver the wide variety of services and operations it administers for the public, including health, education, social services and justice. Our initial audit of I&IT looked at the government's I&IT policies and procedures and assessed whether there are effective general controls in place to maintain the integrity of I&IT systems.

The first government-wide I&IT strategy was released in 1998 to establish a common I&IT infrastructure and governance structure across all ministries (prior to 1998, the government had a decentralized approach to I&IT whereby each ministry had its own I&IT function). The strategy introduced a "clustering" approach whereby I&IT services would be delivered to "business clusters," which are groupings of government programs and services that have similar clients and need similar services, such as the grouping of the Community and Social Services and Children and Youth Services. Over the years, the government's I&IT strategy has evolved to address its changing needs and priorities. The current I&IT strategy (2016–2020) is focused on using technology to improve the delivery of government programs, updating old and outdated I&IT systems, and enabling the analysis of data for decision-making purposes.

The current I&IT organization is made up of the Office of the Corporate Chief Information Officer, three service branches responsible for certain common government-wide services and units supporting ministries organized into nine business clusters. The I&IT organization supports more than 1,200 I&IT systems across the government and has annual expenditures of about $1.3 billion.

We began our audit with a review of service-level agreements for all I&IT systems across the government's nine business clusters. Service-level agreements are important because they clarify the types and quality of service to be provided, how decisions over I&IT systems will be made, and how performance will be assessed. We found that 75% of government I&IT systems do not have service-level agreements in place. Without service-level agreements, ministries and their I&IT clusters leave themselves open to a variety of issues, such as not having sufficient infrastructure to meet the ministries' needs. The service-level agreements that were in place were very generic, poorly formulated and not reflective of current processes. Months into our audit, in April 2016, the Central Agencies cluster drew up a second agreement (for a total of two of the 168 systems it supports); it plans to use these as templates for rolling out more I&IT service level agreements.

To understand how I&IT general controls are managed, we selected three key systems in three separate business clusters to review:

- the Ministry of the Attorney General's Integrated Court Offences Network (Court System), serviced by I&IT's Justice Technology Services cluster—provides case administration support to the Ontario Court of Justice;
- the Ministry of Finance's Tax Administration System (Tax System), serviced by I&IT's Central Agencies cluster—administers the provincial tax system; and
- the Ministry of Transportation's Licensing Control System (Licensing System), serviced by I&IT's Labour and Transportation cluster—administers the registration of vehicles and drivers' licenses.

We evaluated these systems against best practices identified for strong I&IT general controls, as these controls should provide the first level of defence against threats such as hacking, viruses, sabotage, theft and unauthorized access to information and data. They control authorized access to the I&IT systems (*confidentiality*), changes to the I&IT systems (*integrity*), and backup and recovery of systems (*availability*).

Overall, we found that I&IT management is moving in the right direction when it comes to the backup, recovery and operation of I&IT general controls, particularly with the Tax System, which is a relatively newer system than the other two. However, we did find that all three systems needed improvement with implementing controls to prevent unauthorized access to confidential information.

We also noted challenges implementing changes to the Court and Licensing systems, due to concerns that making changes to these outdated systems could corrupt functionality or possibly cause them to crash. Innovation that could improve service delivery is not occurring as a result. When programmers did make changes, we found examples that go against best practice in computer management, such as programmers entering actual data into the Court System. This could result in programmers inadvertently—or fraudulently—entering inaccurate data or altering existing data.

The government initiated projects to replace outdated I&IT systems, however these projects have been significantly delayed. In 2009/10, the Treasury Board approved spending $600 million under the Major Application Portfolio Strategy (MAPS) for the replacement and remediation of 77 I&IT systems across the government. As of June 2016, 66 of these applications had either been retired (17) or upgraded (49). In 2012, the government moved responsibility for the replacement and upgrading of I&IT systems from a central team, which was managed by the Ministry of Government Services, to the individual I&IT clusters supporting the ministries. At the time, $121 million had been spent on MAPS. Of the remaining $479 million, $316 million was transferred by Treasury Board to the relevant Ministries that would ultimately have ownership of the modernized systems. The rest ($163 million) was retained by the Treasury Board. By doing this, Treasury Board hoped that the individual ministries would find additional funding from within their regular capital expenditure budgets to support the I&IT modernization projects.

Although two of the three systems we audited, the Court System and Licensing System, were flagged as overdue for replacement and modernization under MAPS in 2009/10, they still have not been replaced or modernized:

- $11 million was initially spent with a goal of replacing the Court System as part of a much larger I&IT project. The project was unsuccessful mainly due to weak project governance and oversight; insufficient project management procedures; and lack of functionality and integration of the vendor-developed modules. Accordingly no new system was developed, though the government was able to reallocate about $6.5 million worth of hardware and software to other operations. The remaining $4.5 million was written off. Since then, no plan has been put in place that estimates when the existing Court System will be replaced.

- The Licensing System was initially planned to be replaced as part of the Road User Safety Modernization Project (initiated in 2009) by 2016. The project was delayed because management revised their original approach of modernizing the complete system in five years to a phased roll out of the project in three segments. Poor performance from the external vendor, whose contract was terminated, also delayed the project. As of March 2016, $182 million had been spent on the first segment, now expected to be finished by the end of 2016, at an estimated cost of $203 million. The cluster has not yet done an assessment on the timelines and costs associated with the remaining two segments.

The age of the Court System and Licensing System in itself might not be a critical issue if the Ministries were regularly updating them and managing their staffing in an efficient way. However, we noted concerns with the lack of continuous training and knowledge transfer, maintenance being limited, and functionality issues in the government I&IT systems we audited. Because the Court and Licensing systems were originally slated for replacement, annual funding for maintenance to these systems was reduced significantly. Maintenance for these systems has been minimal since 2009, and restricted to levels that allow the ministries to meet only their legislative requirements, rather than enhance their service delivery as had been the intent under MAPS.

2.0 Background

2.1 The Ontario Government's Information and Information Technology (I&IT) Needs

The Ontario government needs information and information technology (I&IT) to help deliver the wide variety of services and operations it administers for the public and to manage its finances and affairs, such as making payments and collecting revenues. The government processes billions of transactions each year and uses I&IT to support and enable the government in areas such as:

- planning, (for example, providing financial data and information as part of the annual budgeting exercise) which requires accessing and analyzing information stored in large databases;
- delivering services to the public (for example, paying social assistance, registering businesses, renewing vehicle licences), which requires information linkages with provincially-funded organizations that serve the public's health, education, social services, justice and safety needs;
- administering its activities, which requires operations to, for example, process health insurance claims; keep records of births and deaths; manage its human resources, finances and business processes; and interact with businesses, investors, trading partners and other governments; and
- evaluating and improving its activities, which requires establishing standards, and measuring and managing outcomes.

2.2 The Evolution of the Government's Vision and Strategy for I&IT

2.2.1 The 1998 I&IT Strategy

Before 1998, the Ontario government had many different I&IT systems and organizations serving each ministry. This began to change when an I&IT strategy document titled *Using Information Technology to Transform Government for the 21st Century* was released in 1998. This document stated:

> At present, the government has too many different information technology systems with little integration between ministries and weak links to the broader

public sector. Computers acquired for particular purposes are incompatible and cannot talk to each other electronically, while different networks make it hard to implement systems across ministries. Diffuse accountability undermines overall financial control of Information Technology (IT) spending. Single-year budgeting means that IT is treated as a cost not an investment, creating barriers to the replacement of older, fragile systems. Moreover, given the tight market for information and information technology skills, ministries on their own cannot assemble the human resources needed to meet all their information technology objectives.

The 1998 strategy:

- put a new government-wide I&IT organization in place, headed by the first Corporate Chief Information Officer;
- introduced "clustering": rather than having I&IT services delivered to individual ministries, I&IT services would be delivered to "business clusters," which are groupings of government programs and services that have similar clients and similar client needs, and need similar services; and
- set up a governance structure that included assigning a Chief Information Officer to each business cluster, who would report to both the deputy ministers in the cluster and the Corporate Chief Information Officer.

A key goal of the 1998 strategy was a common I&IT infrastructure, with underlying I&IT systems that could exchange information with each other. Such an infrastructure would enable a "one-window" approach to service delivery. This means services are delivered electronically instead of using paper forms, and should be delivered more quickly and simply as a result. ServiceOntario, the "one window" delivering services to individuals, was one of the business initiatives under way at the time that urgently required changes to the government's I&IT capacity. (ServiceOntario provides Ontarians with centralized access to a variety of services, such as renewing drivers' licences, registering a business name and applying for an OHIP card, all in one location.) The strategy was to lead the government to set up other "one-stop" service centres where clients need go to just one physical place for all kinds of different services. This was envisioned as a way to both improve service delivery and achieve cost efficiencies in I&IT.

2.2.2 The 2005 eOntario Strategy

In 2005, Cabinet approved eOntario as the government's updated I&IT strategy. The eOntario strategy focused on consolidating I&IT resources and centralizing I&IT infrastructure. This included:

- moving from eight help desks to one service desk;
- moving from eight email systems to one;
- centralizing the separate IT departments serving the 22 ministries in government at the time;
- replacing the Office of the Corporate Chief Service Delivery and iSERV (the government's I&IT infrastructure provider) organizations with a central organization called Infrastructure Technology Services.

The vision was for Ontario Public Service employees to get help from a single service desk, communicate across a single email system and have their desktop computers set up and maintained under a single provincial standard.

By 2007, major changes to I&IT had been completed, including refining the clusters. Those advances notwithstanding, the task of infrastructure consolidation is a gradual process and to a certain extent is still ongoing.

2.2.3 The 2008 Strategic Plan: *Beyond eOntario 2008–13*

The focus of the 2008 strategic plan, titled *Beyond eOntario 2008–13*, was on containing I&IT costs by

coming up with more cost-effective I&IT solutions. The 2008 strategic plan also continued the push toward a more centralized co-ordination approach to overseeing upgrading of I&IT systems, which it called developing "enterprise" systems or "enterprise-wide" services.("Enterprise-wide" means encompassing the entire organization rather than a single business department or function.) Other continuing goals were improved service delivery, information management and collaboration, as well as acquiring dependable and professional I&IT staff.

2.2.4 From 2013 to 2016

Between 2013 and 2016, there was no corporate I&IT strategy. The I&IT organization was still working on achieving the goals of the strategy for 2008–13. However, consultations on the next iteration of the I&IT organization's multi-year strategy started in 2011, well before the expiration of the Beyond eOntario Strategic Plan. These consultations revealed a major shift in concepts about how public services should be delivered, focusing on consumer technologies and evolving digital approaches (such as Internet-based delivery of services and the use of mobile apps) that needed to be reflected in the long-term objectives of the organization. Also, significant changes in senior leadership within I&IT distracted management from setting strategy.

2.2.5 The 2016 Strategy: *Digital Government*

The latest five-year strategy plan was released in April 2016 for the period 2016–20. Its key priorities are:

- digital public services—improve the delivery of government programs with better digital technologies and services;
- business innovation—update old and outdated IT systems (or at least make them compatible with newer technologies) to improve service and the speed of delivery, improve responsiveness, and move away from relying on products tied to a specific vendor; and
- information assets—help the government store, access, process, manage, analyze and use the huge amounts of data it collects to be more effective and bring real value to ministries, citizens and businesses.

2.3 Current I&IT Organization

The current I&IT organization has its head office within the Province's Treasury Board Secretariat. It is made up of the Office of the Corporate Chief Information Officer, three service branches responsible for certain common government-wide services and nine I&IT units supporting ministries organized into business clusters. **Figure 1** shows the relationships between these three I&IT organization components, and the role of the Treasury Board Secretariat, which funds enterprise-wide IT initiatives and oversees the co-ordination of the standardization of I&IT for all of government.

The I&IT organization as a whole had about 4,400 staff and 1,153 full-time consultants working as of March 31, 2016.

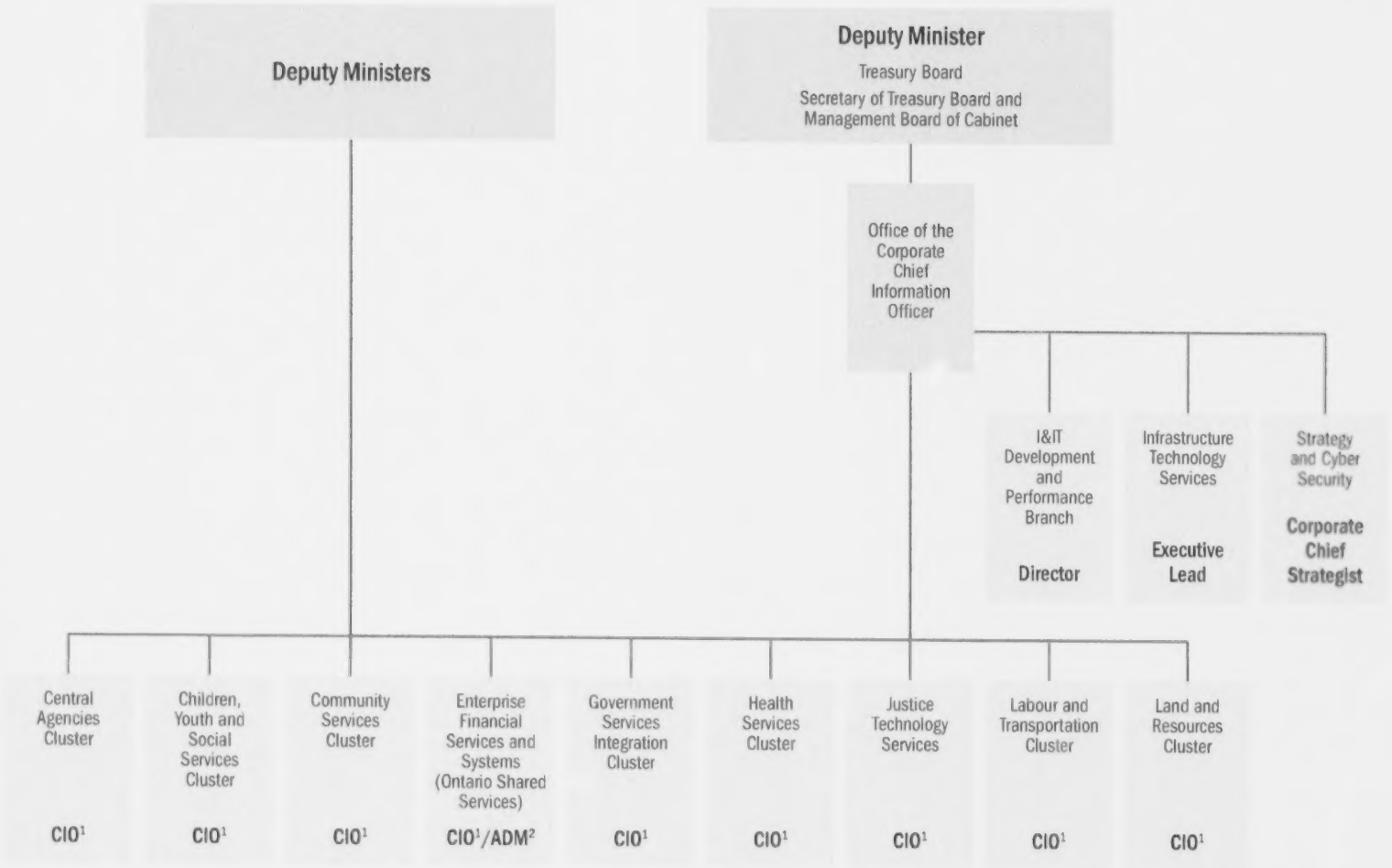
2.3.1 Office of the Corporate Chief Information Officer

The Corporate Chief Information Officer heads the I&IT organization and works with the Treasury Board Secretariat to make strategic and security decisions on technology and set information management policy for all government I&IT operations. The Office of the Corporate Chief Information Officer is responsible for:

- aligning I&IT work to support the government's direction and vision;
- managing all servers, computers, software and mobile devices; and
- keeping networks, information and public records secure.

Figure 1: I&IT Organization Structure

Source of data: Office of the Corporate Chief Information Officer



1. Chief Information Officer
2. Assistant Deputy Minister

2.3.2 Three Service Branches

The three service branches are responsible for government-wide services and report to the Corporate Chief Information Officer.

Infrastructure Technology Services

The Infrastructure Technology Services branch is responsible for:

- corporate services —includes I&IT procurement oversight and execution and the costing and pricing of I&IT services government-wide;
- customer relationship management—ensures the delivery of services to the I&IT clusters and their ministry business areas;
- data centre operations;
- desktop and field support services;
- enterprise planning and project delivery services for ministry clients;
- I&IT infrastructure project delivery;
- service management—ensures incident, change, and service level management are functioning efficiently;
- telecommunications—such as telephone, voicemail, audio and video conferencing services; and
- business continuity planning.

I&IT Strategy and Cyber Security

The I&IT Strategy and Cyber Security branch leads the development of I&IT strategy and policies. It is also concerned with performing corporate technical reviews of I&IT systems and provides advice to the I&IT Project Approval Committee on relevant I&IT projects.

I&IT Development and Performance

The I&IT Development and Performance branch is made up of three units:

- I&IT learning;
- I&IT strategic marketing and communications; and
- performance measurement and reporting.

2.3.3 Nine I&IT Clusters

In each of nine business clusters, I&IT staff and consultants support the ministries' I&IT systems. The clusters service more than 1,200 I&IT systems in 30 ministries and offices. **Figure 2** lists the ministry clients of each business cluster and examples of key I&IT systems that each business cluster supports.

Each cluster provides day-to-day I&IT support to its ministry clients and for the ministry-owned I&IT systems. The support covers I&IT security, managing hardware and software program changes, and ensuring the systems operate continuously and reliably. Each cluster is led by its own Chief Information Officer, who reports to the deputy ministers of the individual ministries that the cluster supports as well as to the Corporate Chief Information Officer.

2.4 I&IT Funding

The Treasury Board Secretariat funds most enterprise-wide I&IT initiatives. The ministries fund their own ministry-specific I&IT initiatives and services.

During 2015/16, the Treasury Board Secretariat and individual ministries combined spent $1.3 billion on I&IT expenditures. **Figure 3** shows the total expenditures for the 10-year period from 2006/07 to 2015/16. Expenditures (mainly capital) climbed sharply in 2011/12—by almost $122 million—due to the completion of projects to modernize several older systems, and in 2015/16 (mainly operational) by almost $119 million mainly due to several smaller projects being initiated.

Figure 4 and **Figure 5** show the operational and capital expenditures of the I&IT organizational units from 2013/14 to 2015/16.

2.5 Controls over I&IT Systems

There are two types of controls over I&IT systems: application controls and general controls.

I&IT application controls (also known as program controls) are checks embedded within specific computerized software applications (for

Figure 2: I&IT Business Clusters' Clients and Select Key I&IT Systems Supported

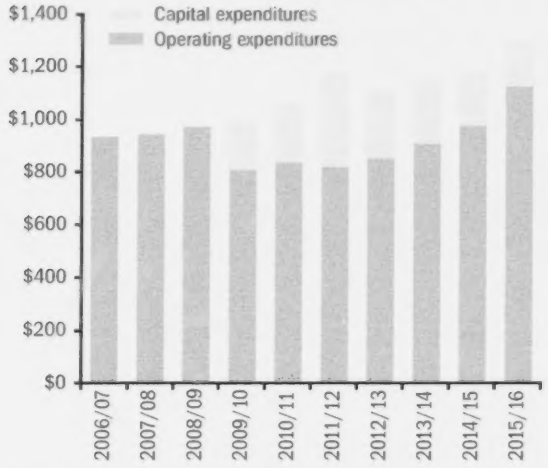
Source of data: Office of the Corporate Chief Information Officer

I&IT Cluster	Ministry/Office Client	Select Key I&IT Systems Supported
Central Agencies	• Cabinet Office • Finance • Intergovernmental Affairs • Treasury Board Secretariat	• Ontario Tax Administration System* (records all tax revenue collected)
Children, Youth and Social Services	• Children and Youth Services • Community and Social Services	• Child Protection Information Network (documents child protection case information) • Social Assistance Management System (used for administration of social assistance cases)
Community Services	• Advanced Education and Skills Development • Citizenship and Immigration • Education • International Trade • Municipal Affairs Housing • Tourism, Culture and Sport • Women's Directorate	• Case Management System (supports the administration of clients participating in Employment Ontario programs) • Ontario Student Assistance Program system (processes student loan applications)
Enterprise Financial Services and Systems	• Ontario Shared Services (part of Government and Consumer Services)	• Integrated Financial Information System (records the Province's financial information)
Government Services Integration	• Economic Development and Growth • Energy • Francophone Affairs • Government and Consumer Services • Infrastructure • Research, Innovation and Science • Seniors' Secretariat	• Ontario Business Information System (records information pertaining to organizations registered to do business in Ontario) • Workforce Information Network (processes payroll for all employees of the Ontario Public Service)
Health Services	• Health and Long-Term Care	• Medical Claims Processing System (processes medical claims submitted under the Ontario Health Insurance Plan) • Health Network System (processes claims submitted under the Ontario Drug Benefit Program)
Justice Technology Services	• Attorney General • Community Safety and Correctional Services	• Integrated Court Offences Network* (supports the administration of the Ontario Courts of Justice) • Offender Tracking Information System (records data pertaining to offenders)
Labour and Transportation	• Labour • Transportation	• Licensing Control System* (processes licensing and registration transactions relating to drivers and vehicles) • Capital Improvement Delivery System (maintains construction plans and manages expenditures for all road improvements)
Land and Resources	• Agriculture, Food and Rural Affairs • Environment and Climate Change • Indigenous Relations and Reconciliation • Natural Resources and Forestry • Northern Development and Mines	• Drinking Water Information Management System (manages and reports data on drinking water facilities and water quality) • Environmental Approvals and Sector Registry (registration for low-risk businesses having a possible impact on the environment)

* These I&IT systems were reviewed for this report.

Figure 3: I&IT Total Operating and Capital Expenditures, 2006/07–2015/16 ($ million)

Source of data: Office of the Corporate Chief Information Officer



Note: Before 2009/10, the Office of the Provincial Controller had not instituted capitalization of IT assets and services and there was no government policy in place for them.

example, payroll, accounts receivable and order processing) that I&IT systems automatically perform to ensure that data entered and transactions processed are done completely and accurately, from input through output. For example, an edit check where a user cannot input an alphabet character in a numeric field.

I&IT general controls, the focus of our audit, are controls that apply to the overall design, security and use of computer programs and data files throughout an organization. They consist of system software and manual procedures that help ensure that the organization's I&IT systems are operating reliably and as intended. I&IT general controls typically cover security over who can access the system and perform maintenance and changes to the system, and procedures for backing up and restoring should the system fail. The following subsection describes I&IT general controls in detail.

2.5.1 Specific Outcomes of Good I&IT General Controls

When an organization has established comprehensive and effective I&IT general controls, it has reasonable assurance that its I&IT systems are secure and operating in a proper environment, in that:

- Only authorized staff can access I&IT systems and data; unauthorized access is prevented.
- Computer hardware is physically secure (for example, access to rooms where servers operate is restricted to I&IT staff; computer equipment is protected against fires and extremes of temperature and humidity).
- The process of developing new systems or changing existing systems is managed and controlled to ensure only planned outcomes are achieved and properly documented.
- Processing problems (for example data is not transferred completely and accurately between two systems) are identified and resolved completely, accurately and quickly so data integrity and system reliability is maintained.
- Backup, restart and recovery procedures are in place with the technical documentation available, so processing that ends abnormally does not result in system damage or data loss, and recovery time to full functionality is minimal.
- I&IT staff follow procedures for setting up computer processing jobs (such as batch jobs used to process multiple transactions at the same time), operating software and hardware.

2.5.2 Key Risk Areas that Good I&IT General Controls Should Address

We identified, based on research and best practices, nine key risk areas that effective I&IT general controls should address:

- *Service-level agreements*—A contract between the I&IT cluster management and ministries it serves should be established that formally and clearly sets out each party's roles and responsibilities for governance, accountability and

Figure 4: I&IT Operational Expenditures by Organizational Unit, 2013/14–2015/16 ($ million)

Source of data: Office of the Corporate Chief Information Officer

I&IT Unit Area	2013/14	2014/15	2015/16	Total
Office of the Corporate Chief Information Officer	175	172	147	**494**
Children and Youth cluster	114	132	153	**399**
Health cluster	84	129	140	**353**
Central Agencies cluster	129	123	98	**350**
Community Services cluster	105	119	115	**339**
Justice cluster	51	51	171	**273**
Labour and Transportation cluster	85	90	90	**265**
Land and Resources cluster	87	76	85	**248**
Government Services cluster	58	68	110	**236**
Enterprise Financial cluster	19	19	17	**55**
Total	**907**	**979**	**1,126**	**3,012**

Figure 5: I&IT Capital Expenditures by Organizational Unit, 2013/14–2015/16 ($ million)

Source of data: Office of the Corporate Chief Information Officer

I&IT Unit Area	2013/14	2014/15	2015/16	Total
Office of the Corporate Chief Information Officer	30	57	52	**139**
Labour and Transportation cluster	32	47	48	**127**
Children and Youth cluster	79	35	12	**126**
Health cluster	43	21	20	**84**
Community Services cluster	21	19	4	**44**
Government Services cluster	25	7	7	**39**
Justice cluster	4	4	19	**27**
Land and Resources cluster	16	5	3	**24**
Central Agencies cluster	5	3	4	**12**
Total	**255**	**198**	**169**	**622**

Note: Capital expenditures are based on Ministry allocations as opposed to I&IT clusters. The Office of the Corporate Chief Information Officer does not have oversight over these expenditures as they are the responsibility of each ministry. Therefore the Office of the Corporate Chief Information Officer did not have the source data to calculate expenditures at a cluster level. We have combined the Ministry capital allocations under supporting clusters to provide an indication of the amount being spent on capital expenditure pertaining to IT. This expenditure would include both I&IT related and Ministry related IT capital expenditures.

expected performance and quality of service in accordance with the ministries' current and future needs.

- *I&IT human resource management*—Adequate staffing levels and skills should exist to ensure effective controls, maintenance and operations are achieved to meet expected service levels.
- *Logical security*—Controls should exist to ensure only authorized users have access to and can use data, programs and networks. Examples of controls are user IDs and passwords to authenticate users, and restricting access to systems.
- *I&IT operations*—Activities and operational procedures required to support the delivery of I&IT services, including the execution of pre-defined standard operating procedures and the required monitoring activities should be in place.

- *Change management*—Controls should exist to ensure changes to key systems are made quickly, reliably and have minimal negative impact on the system's stability or integrity.
- *Incident management*—Controls should exist to ensure user queries and incidents (such as service interruptions) are resolved as soon as possible.
- *Problem management*—Controls should exist to ensure not only that there are as few operational issues as possible, but that the number of issues steadily decreases, thereby increasing system availability, improving service levels, reducing costs and improving customer convenience and satisfaction.
- *Availability and capacity management*—Controls should exist to ensure that the use of I&IT services is monitored, performance expectations are met and plans are made to predict and meet future user needs. This will enable services to be available whenever needed, resources to be managed efficiently and systems to be high-performing.
- *Business continuity and disaster recovery*—Effective processes should exist to address unexpected events that disrupt operations (for example, power failures, IT system crashes) in order to restore or recover operations and information as quickly as possible.

3.0 What We Looked At

For our first audit of government I&IT systems, we looked at whether the government has effective I&IT policies, procedures and controls in place covering security, changes, operations, availability, capacity, continuity and disaster recovery to ensure the integrity of government I&IT systems and data files.

To do this, we examined I&IT general controls for three key I&IT systems managed by the I&IT organizations:

- the Ministry of Transportation's Licensing Control System (Licensing System), serviced by the Labour and Transportation Cluster;
- the Ministry of the Attorney General's Integrated Court Offences Network (Court System), serviced by the Justice Technology Services Cluster; and
- the Ministry of Finance's Ontario Tax Administration System (Tax System), serviced by the Central Agencies Cluster.

Figure 6 outlines the key features of these three I&IT systems.

The selection of these three systems allowed us to audit systems across three different ministries and I&IT clusters and look at two older I&IT systems (Court System and Licensing System) and one relatively newer one (Tax System). We interviewed I&IT cluster and ministry staff, reviewed key documents and reports, and observed procedures and controls in action at the three ministries that own the three systems (that is, the ministries of the Attorney General, Finance and Transportation). We also tested both automated controls and manual procedures carried out by I&IT staff. We followed a risk-based approach—if the risk likelihood and impact was high we performed more in-depth procedures. In addition, we inquired with other I&IT clusters to determine whether the issues we identified, around service-level agreements being inadequate, were prevalent in other clusters.

Prior to commencing our work we identified the criteria we would use, which were reviewed and agreed to by the Chief Information Officers of the I&IT clusters for the three ministries. We also reviewed relevant audit reports issued by the province's Internal Audit Division. These reports were helpful in determining the scope and extent of our audit work. Most of our work was conducted between December 2015 and June 2016.

Figure 6: Key Features of I&IT Systems We Audited

Source of data: Central Agencies cluster, Justice Technology Services cluster and Labour and Transportation cluster

	Ministry of the Attorney General's Court System	Ministry of Transportation's Licensing System	Ministry of Finance's Tax System
Main function	Supports the administration of the Ontario Court of Justice	Processes licensing and registration transactions relating to drivers and vehicles	Administers tax revenue and benefits programs
Core applications/ subsystems/modules	• Case Management (adult and youth criminals and offenders) • Scheduling of court cases • Financial (fines, fees, costs, bail and restitution)	• Driver Licensing and Control System • Vehicle Registration System • Commercial Vehicle Operator Registration System • Motor Vehicle Inspection Station System	Manages client tax rolls, assessments, payments, collections and audits for: • retail sales tax • gas and fuel tax • tobacco tax • land transfer tax • beer and wine tax • debt retirement charge
Year implemented	1989	1967	2006
Last major upgrade	2013	2010	2014
Number of users	5,000	3,300	1,000
Average transactions/ month	10 million (2015)	30 million (2015)	400,000 (2015)
Total Annual Revenue processed	$270 million (2016)	$1.5 billion (2016)	$16 billion (2016)
Data volume	• 18.5 million court cases • 120 courts	• 10 million drivers • 33 million vehicles	• 2.2 million taxpayers
Number of I&IT staff/ contractors servicing system	• 1 staff, 1 contractor dedicated to system • 3 other staff support this and other systems	• 10 staff, 14 contractors dedicated to system • 114 other staff, 61 contractors support this and other systems	• 37 staff, 15 contractors dedicated to system

4.0 Key Observations and Recommendations

4.1 Key to High-Performing I&IT Systems—Service-Level Agreements—Not in Place between I&IT Clusters and Ministries

Although the establishment and monitoring of service-level agreements between a client (such as a ministry) and its service provider (such as an associated I&IT cluster) is one of the criteria that good I&IT general controls should address (see **Section 2.5.2**), until June 2016, which is when our audit was substantially completed, few such agreements had been drawn up. Service-level agreements are important because they clarify the types and quality of service to be provided, how decisions over I&IT systems will be made, and how performance will be assessed. A service-level agreement ensures that I&IT clusters agree with the ministry's expectations and clearly sets out the roles and responsibilities of the I&IT cluster and ministries, performance expectations, and accountability measures to ensure they are consistently met by the individual I&IT clusters. Without service-level

agreements in place, ministries and their respective I&IT clusters leave themselves open to a variety of issues, such as not having sufficient infrastructure to meet the ministries' needs and unauthorized changes being made to information. **Figure 7** outlines key elements that should be included in service-level agreements and the potential risk or impact if they are not.

When we began our audit, there were no service-level agreements in place between the ministries and three I&IT clusters for the three systems in the scope of our audit. In cases where agreements were in place, such as with the Justice Technology Services cluster, they were very generic, poorly formulated and, being more than ten years old, not reflective of current processes. Moreover, I&IT staff were not using them and relevant staff at the Ministry of the Attorney General told us they were not aware the agreements even existed to hold the clusters to expected performances. When the I&IT clusters were being formed in the mid-2000s, there was the opportunity for service-level agreements to be drawn up as an integral part of the process as the ministries and clusters began working together. However, this did not occur. We also found no evidence of the Office of the Corporate Chief Information Officer establishing and monitoring the implementation and use of service-level agreements across the clusters.

Figure 7: Elements that Should Be Included in Service-Level Agreements, and Potential Risk or Impact If They Are Not
Prepared by the Office of the Auditor General of Ontario

Service-Level Element	What Should Be Included	Potential Risk or Impact When Not Addressed
Roles and Responsibilities	Which party (specific ministry department or I&IT cluster team) is responsible for what aspect of the service delivery, reporting and monitoring.	Lack of ownership of issues and accountability, and breakdown in communication.
Service times	How quickly service is to be provided.	Users dissatisfied with how quickly service is provided.
Availability considerations	Includes how much downtime is acceptable and what rate of service failure is allowed.	System is down or fails far more often than expected.
Performance requirements	Explicitly stated targets geared to each different operation (e.g., each user interaction with the system should have an ideal satisfactory response time).	System fails to function as required.
Capacity needs	Assessment of a ministry's capacity needs so that I&IT can assess whether the existing infrastructure is sufficient or needs to expand.	Existing system infrastructure is insufficient to meet the ministry's needs.
Security requirements	Requirements relating to the confidentiality of the system and its data. They need to be explicitly stated (including what must not be allowed to happen) for security testing to take place. They cover things like authenticating the user's identity and right to access the system, and backup procedures.	Unauthorized changes are made to information, unauthorized individuals access sensitive information, and ministry may not have any way of knowing about it.
System and service continuity	This includes, among other things, the policies, standards and processes for preventing, predicting and managing actual and potential disruptions of the system and services.	Ministry operations shut down for an unacceptably long period when systems stop working because of a disruption/disaster.
Compliance and regulatory issues	The steps to be taken to comply with laws and regulations, as well as internal and external guidelines and standards relevant to I&IT.	No controls designed to comply with—such as protection of personal information—leaving the ministry liable to be in violation of the relevant laws or regulations.
Demand constraints	The rate at which processes need to run to meet the demand placed on them needs to be specified.	Processes do not run at the right rate (fast enough and at the most efficient rate).

Figure 8: Current Status of Service-Level Agreements
Source of data: I&IT clusters

I&IT Business Clusters	Service-Level Agreements in Place?	Reporting Being Performed Over Service-Level Agreements?
Central Agencies	1% (2 out of 168 systems)	None
Children, Youth and Social Services	2% (3 out of 159 systems)	Limited
Community Services	39% (46 out of 118 systems)	Limited
Government Services Integration	55% (120 out of 210 systems)	Limited
Health Services	100% (84 out of 84 systems)	Limited
Justice Technology Services	0 out of 94 systems	None
Labour and Transportation	0 out of 166 systems	None
Land and Resources	22% (54 out of 246 systems)	None
Overall	**25% (309 out of 1,245 systems)**	

Months into our audit, in April 2016, the Central Agencies cluster drew up a second service-level agreement (for a total of two of the 168 systems it supports), which was signed and approved by the Ministry of Finance. The cluster identified that they plan to use these service-level agreements as a template to roll out to the other 166 systems.

All of the nine I&IT clusters should have service-level agreements in place with the 30 ministries and offices they currently serve. These service-level agreements should cover the approximately 1,200 I&IT government systems. Depending on the size and nature of the I&IT systems being supported, one service-level agreement could cover multiple systems.

Figure 8 outlines the status of service-level agreements across the clusters as of the completion of our audit.

4.1.1 Service-Level Agreements Essential to Meeting Current I&IT Strategic Objectives

Service-level agreements can be used as an effective tool for the implementation of the strategic objectives stated in I&IT's 2016-20 strategy. Service-level agreements help to translate objectives at the strategic level into more concrete key performance indicators. In other words, they help to clarify what performance levels at a minimum must be achieved in order for the overall strategic objectives to be met.

As mentioned in **Section 2.2.5**, key components of the I&IT strategy for 2016–20 are "digital services", "business innovation" and "information assets." Well-formulated service-level agreements are needed to spell out specifically what I&IT must do to achieve all of the above—that is, what it must do to make I&T services and responsiveness better and faster. Without having service-level agreements in place and reporting over these, the government will never be able to get a sense of how effective the I&IT strategy is. This is also highlighted by the fact that, between 2013 and 2016, there was no corporate I&IT strategy as I&IT was still working on achieving the 2008-13 strategy. Had there been appropriate service-level agreements in place earlier (aligned with the I&IT strategy) and sufficient reporting and monitoring over these, the government would have been able earlier to devote the additional efforts needed to ensure that actual performance stays on track to meet the strategic objectives.

RECOMMENDATION 1

To ensure ministries receive high-quality I&IT services that meet their needs, the I&IT clusters and ministries should establish formal service-level agreements that are aligned with the overall I&IT strategy and:

- document the roles and responsibilities of both parties;
- set out specific, measurable, attainable, reportable and time-bound performance requirements;
- state agreed service times;
- outline availability and compliance and regulatory considerations;
- identify security requirements and capacity needs;
- set out the policies and procedures for system and service continuity; and
- ensure that service levels are monitored by requiring I&IT clusters to report regularly to ministries on their achievement of expected performance.

I&IT ORGANIZATION RESPONSE

The I&IT organization and ministries agree with the Auditor General and recognize and accept the critical importance of service management to the overall I&IT strategy and to ensuring high-quality services that meet the needs of government organizations. We acknowledge the need to ensure service-level agreements are in place for all I&IT systems and, to this end, the I&IT organization has recently established a new enterprise service management (eSM) division. Led by a Chief Information Officer and reporting directly to the Corporate Chief Information Officer, the mandate of eSM will include:

1. Establishing a defined Government of Ontario IT Standard (GO-ITS) for service level management that ensures service-level agreements are in place between all clusters and ministries and that they include the nine key elements identified in the audit report.
2. Expanding the scope of existing service-level agreements to more closely align with the current 2016 I&IT Strategy and also include performance metrics for mission and business critical ministry applications.
3. Ensure regular reporting to ministries on the performance of mission and business critical applications compared to the expected performance.

4.2 I&IT General Controls Can Be Improved

We assessed each of the three systems selected on the nine risk areas of I&IT general controls (**Figure 9** presents a summary of our findings). Based on our audit, we noted weaknesses (to various degrees) in seven areas for the three systems we looked at:

- *Service-level agreements*—At the time of our audit, neither the Court System nor the Licensing System had formal service-level agreements in place. In addition, we noted that there is no formal monitoring and reporting of service performance, an expectation that should be included in such agreements.
- *I&IT human resource management*—Of the three systems audited, we noted that the Court System had inadequate support staff, relying on just one external consultant and one staff member to maintain the system. The age of this system is a factor to these staffing challenges, as described in **Section 4.3.1**.
- *Logical security*—There were issues with all three I&IT systems (in varying degrees) noted where users were granted inappropriate access to sensitive and confidential data. With the Court System in particular, there was no formal process in place for creating and modifying users' access, and 41% of users had access to the system when their job status did not require any access at all. Activity logs are not reviewed for appropriateness for the Court and Licensing Systems. Management for all three systems have not reviewed user roles and access permissions on a regular basis to validate if individuals still require access based on their current job function.

Figure 9: Summary of I&IT General Controls In Place at Three Systems Audited

Prepared by the Office of the Auditor General of Ontario

I&IT General Controls Area	Court System	Licensing System	Tax System
Service-level agreements in place	No	No	Yes
Adequate human resources and staffing	No	Yes	Yes
Sufficient logical security controls to prevent unauthorized use	No	No	No
Adequate operational procedures to support service delivery	No	Yes	Yes
Effective change management procedures in place	No*	No*	Yes
Efficient incident management controls	No	Yes	Yes
Formal problem management procedures in place	No	No	No
Monitoring and planning for system availability and capacity management	Yes	Yes	Yes
Effective business continuity and disaster recovery processes	Yes	Yes	Yes
Areas that need improvement	**7/9**	**4/9**	**2/9**

* Formal change management procedures are in place, but system changes are taking more time and effort to implement due to system age and complexity.

- *I&IT operations*—The Court System lacked documented I&IT operational procedures and had no process in place to verify that batch jobs (functions that process multiple transactions at the same time, usually overnight) were completed successfully.
- *Change management*—We noted that while all three systems had formal change management procedures in place, system changes (to the Court and Licensing Systems in particular) take more time and effort to implement due to the age of the systems.
- *Incident management*—The Licensing and Tax systems both had good quality data related to incident records and operational logs. However, we noted that the incident records and program change records for the Licensing System were poorly linked, which would have corrected the cause of the incident. The Court System had a poor quality of incident records and did not maintain operational logs, which provide vital information relating to I&IT operations.
- *Problem management*—None of the three systems we audited conducted root-cause or trend analysis on incidents. This analysis would enable the I&IT clusters to identify and address interrelated and recurring incidents having a wider impact on I&IT performance.

Our audit found that all three systems adequately addressed the remaining two risk areas:

- *Availability and capacity management*—all three systems had adequate controls in place to ensure that the use of I&IT services is monitored, performance expectations are met and plans are made to predict and meet future user needs.
- *Business continuity and disaster recovery*—all three systems had effective processes in place to address unexpected events that disrupt operations, such as power failures and system crashes.

Our detailed assessment of the nine I&IT general control risk areas for each of the three systems we looked at is provided in the **Appendix**.

RECOMMENDATION 2

The Justice Technology Services I&IT cluster should:

- Establish formal service-level agreements covering the systems and implement formal monitoring and reporting over service levels.

- Ensure they engage appropriate staff with the necessary skills and expertise.
- Ensure succession plans are in place to allow for the transfer of knowledge.
- Establish job descriptions and service-level agreements for the services provided by all consultants and, on a regular basis, monitor consultants' performance and assess against the job descriptions and service-level agreements.
- Perform a review, in conjunction with the Ministry of the Attorney General (Ministry), of the current users' access to the system. The review should focus on the predefined access levels set up on the system and the employees' responsibilities. Where users have been granted access levels that pose potential conflicts related to segregation of duties (such as developers having access to make data changes), these access levels should be corrected immediately and appropriate controls put in place to address any potential conflicts in the future.
- Ensure that on a regular basis, the Ministry reviews user access and revalidates it for appropriateness. On an annual basis, the Ministry should revisit the access granted to employees and their responsibilities to ensure there are no conflicts related to segregation of duties and reflect any changes in roles, procedures and processes as seen necessary.
- Enable logging of all user access to information and transaction changes and monitor key activities on an ongoing basis. The extent of logging should be driven by the sensitivity and criticality of the data. The Ministry should define the data it considers sensitive and critical and that needs to be logged and proactively monitored.
- Implement a formal process for creating and modifying users' access, including a centralized list of authorized approvers who can request access on behalf of users.
- Implement automated controls to verify that batch job processing is successful and in line with end users' requirements. These controls must verify the completeness, accuracy and validity of the data output.
- Formally document, approve and communicate I&IT operational procedures.
- Ensure that the data being entered within the incident management tool is complete, accurate and valid. Once incident data quality is achieved, management should implement a formal problem-management process to identify trends, the root cause of recurring issues and remediation plans.
- Based on the service-level agreement:
  - identify logs that need to be maintained and monitored;
  - define thresholds for logs and implement log monitoring tools to facilitate the interpretation of log data;
  - configure system alerts for staff to follow up on potential issues; and
  - review monitoring protocols on a regular basis to ensure that they are still valid.
- Utilize I&IT cluster staff efficiently by:
  - implementing a self-serve functionality on the system so end users can resolve basic incidents, such as forgetting their passwords, without direct interaction with helpdesk staff;
  - training helpdesk staff to resolve more complex user incidents; and
  - assigning dedicated technical support staff to identify ongoing incident issues and develop permanent fixes.

I&IT CLUSTER RESPONSE

The Justice Technology Services I&IT cluster agrees with the Auditor General and plans to address these recommendations by implementing the following:

- The cluster is currently drafting service-level agreements for the Court System. Logging, alerting, monitoring and reporting protocols, and the tools necessary to perform these tasks will be developed to support the terms of the service-level agreements.
- The cluster is developing a strategy for providing ongoing support (incorporating succession planning and knowledge transfer) for the Court System. As an initial step, the cluster has acquired the services of an additional development resource. In conjunction, the manner in which existing roles are utilized will be reviewed to assess efficient use and necessary skills and expertise.
- Consultant's performance will be monitored and assessed on an ongoing basis against the requirements of the role and the Statement of Work associated with their contract, which defines the terms of their engagement.
- The cluster will facilitate a user access review, in partnership with the Ministry of the Attorney General (Ministry), including establishing appropriate thresholds for user account inactivity and ongoing access level review. The cluster will work with the Ministry to strengthen the process for creating and modifying user access and identify areas for improvement (including reviewing potential conflicts related to segregation of duties).
- The cluster will investigate means for introducing automated controls for the tracking, monitoring, alerting and reporting/recording of batch process results. Operational procedures documentation requiring an update will be reviewed, updated as necessary and communicated.
- The cluster will document and communicate approved I&IT operational procedures.
- The cluster will continue to develop and enhance the operational reporting analysis established in January 2016, which includes Helpdesk operations, to identify improvements to the recording of incidents, including modification of defined support templates.
- The cluster will utilize I&IT staff efficiently by implementing functionality to deal with basic and complex issues, as well as permanent fixes.

RECOMMENDATION 3

The Labour and Transportation I&IT cluster should make the following improvements to the Licensing System:

- Establish a formal service level agreement covering the system and implement formal monitoring and reporting over service levels.
- Perform a review, in conjunction with the Ministry of Transportation (Ministry), of the current users' access on the system. The review should focus on the predefined access levels set up on the systems and the employees' responsibilities. Where users have been granted access levels that pose potential conflicts related to segregation of duties, these access levels should be corrected immediately and appropriate controls put in place to address any potential conflicts in the future.
- Ensure that on a regular basis, ministries review user access and revalidate it for appropriateness. On an annual basis, ministries should revisit the access granted to employees and their responsibilities to ensure there are no conflicts related to segregation of duties and reflect any changes in roles, procedures and processes as seen necessary.
- Enable logging of all user access to information and transaction changes and monitor key activities on an ongoing basis. The extent of logging should be driven by the

sensitivity and criticality of the data. The Ministry should define the data it considers sensitive and critical and that needs to be logged and proactively monitored.

- Ensure that there is clear linkage between the incident records in the incident management tool and the program change records addressing those incidents.
- Implement a formal problem management process to identify trends, the root cause of recurring issues and remediation plans.

I&IT CLUSTER RESPONSE

The Labour and Transportation I&IT cluster agrees with the Auditor General and in conjunction with the Ministry of Transportation (Ministry) will work to implement all of the auditor's recommendations.

To address the individual recommendations:

- The cluster will follow the defined Government of Ontario IT Standard for service level management. The cluster's work will include application reporting timelines consistent with the advice provided by the Auditor General such as:
  - defined service-level agreements with implementation targets; and
  - implementing quarterly and annual service-level agreements service metrics and report results.
- The cluster, in collaboration with the Ministry, will continue to make this a priority including implementation of associated procedures for continued monitoring and review of user access.
- Work is underway to complete a procedure guideline for regular periodic review of user access. The cluster, in collaboration with the Ministry, will continue to make this work a priority.
- The cluster recognizes that effective monitoring and logging of user access to sensitive and critical data is a priority. Logging of user access to information and transactions is now in place and the Licensing System activity logs are available. The Road User Safety Modernization project is defining the data it considers sensitive and is implementing role-based security as systems go live to limit access to sensitive data based on job requirements.
- The cluster will ensure more robust procedures are in place to ensure clear linkage between incident records and program change records used to address these incidents. This will form part of our service-level agreements discussion.
- The cluster will ensure more robust procedures are in place to ensure root cause of recurring issues and remediation plans are captured within the incident management tool to support trend analysis and required remediation plans. This will form part of our service-level agreements discussion.

RECOMMENDATION 4

The Central Agencies I&IT cluster should make the following improvements to the Tax System:

- Implement formal monitoring and reporting over service levels against the Ministry of Finance (Ministry) approved service-level agreements.
- Perform a review, in conjunction with the Ministry, of the current users' access on the system. The review should focus on the predefined access levels set up on the system and the employees' responsibilities. Where users have been granted access levels that pose potential conflicts related to segregation of duties, these access levels should be corrected immediately and appropriate controls put in place to address any potential conflicts in the future.
- Ensure that on a regular basis, ministries review user access and revalidate it for

appropriateness. On an annual basis, ministries should revisit the access granted to employees and their responsibilities to ensure there are no conflicts related to segregation of duties and reflect any changes in roles, procedures and processes as seen necessary.

- Implement a formal problem-management process to identify trends, the root cause of recurring issues and remediation plans.

I&IT CLUSTER RESPONSE

The Central Agencies I&IT Cluster agrees with the Auditor General and will address these recommendations by implementing the following:

- The cluster has formalized a management oversight process to monitor and report on service levels outlined in service-level agreements for our two largest systems, OntTax, and imageON. Working with our business partners, the cluster is drafting service-level agreements for our next three largest systems/services and additional service-level agreements, or their equivalents, will be implemented to address numerous smaller systems, as recommended in the report.
- The cluster will facilitate a user access review, in partnership with Ministry of Finance, to assess segregation of duty controls. Any identified conflicts will be corrected immediately.
- The cluster has strengthened user access controls by implementing regular monthly reporting processes to ensure users are appropriately authorized. Regular access reviews will be implemented to ensure appropriateness.
- The cluster is implementing a problem management process for all supported major applications. This will include trend analysis, root cause identification and problem remediation/resolution.

RECOMMENDATION 5

The Office of the Corporate Chief Information Officer should assess existing I&IT systems for compliance with the nine key risk areas that effective I&IT general controls should address. Action should be taken to strengthen areas that need to be improved, for example, establishing formal service-level agreements that are aligned with the overall I&IT strategy.

I&IT ORGANIZATION RESPONSE

The Office of the Corporate Chief Information Officer agrees with the Auditor General and recognizes the need to assess all I&IT systems against the nine key risk areas that effective I&IT general controls should address.

To enable this analysis, the I&IT organization has defined and established an Application Portfolio Management (APM) approach to address risks associated with aging systems and to inform application rationalization opportunities. An inventory of all I&IT applications has been established and key data elements associated with each application have been collected and analyzed. This data can be used as a starting point (and then built upon to ensure inclusion of all nine risk categories) to assess each application's I&IT general controls risk.

Through the new Enterprise Service Management division and the development of APM processes and guidelines—the I&IT organization will establish standards for service-level agreement creation and management of I&IT systems, starting with those classified as mission and business critical.

The I&IT organization will improve service by:

- enabling greater consistency in how service management processes are delivered, driving increased quality and effectiveness;

- establishing a service-level agreement framework aligned to the nine key risk areas; and
- improving the service management process across the I&IT organization.

Also, the I&IT organization will continue to work with the Centre for Leadership and Learning and HR-Strategy Business Units to continue to focus on skills development and succession planning for key mission critical IT systems.

4.3 Maintenance of Aging Systems is Inefficient and Staff Lack Training

Ontario has some very old I&IT systems that are becoming increasingly obsolete due to their age (**Figure 10** provides examples of key systems that are more than 25 years old and that use obsolete software). Of the three systems we audited, two are more than 25 years old: the Licensing System is 48 years old and the Court System is 27 years old.

The age of the systems in itself might not be a critical issue if the government was regularly updating them and managing their staffing in an efficient way. However, we noted concerns specific to the lack of continuous training and knowledge transfer, maintenance being limited, and functionalities issues in the government I&IT systems we audited.

4.3.1 Systems Vulnerable Due to a Lack of Continuous Training and Knowledge Transfer

Court System

The Court System, which is used by 120 courts and 5,000 users across Ontario, was written in a version of a programming language that is no longer supported by the vendor who produced it. All programming changes in the Court System are currently made by two individuals (both of whom are eligible for retirement)—one staff member and one consultant who is not as proficient in the Court System programming as the staff member. The Justice Technology cluster has no succession plan in place for either individual, so if they were to leave or retire soon, it will be difficult to find qualified replacements and get them up to speed quickly. Even if the Ministry of Justice was able to find people who know the programming language of the system, there would be a significant problem because the documentation they would need to perform their duties is incomplete, outdated or, in some cases, non-existent.

As with all I&IT systems, two types of documentation should be available for the Court System:

- documentation tracking all programming changes or modifications to code that have been made to the system over time; and
- operational documentation, such as procedural manuals, instructing I&IT operations staff how to support the system.

Figure 10: Examples of Old I&IT Systems In Use
Source of data: I&IT clusters

System	Ministry	Age (Years)	Purpose
Licensing System	Transportation	48	Processes transactions relating to licensing drivers and registering vehicles.
Payment Processing	Government and Consumer Services	31	Records and reports cheque payments.
Employment Standards	Labour	27	Maintains information on *Employment Standards Act* decisions.
Personal Property Security Registration	Government and Consumer Services	27	Maintains public database for creditors to register and conduct searches.
Court System	Attorney General	27	Supports the administration of the Ontario Court of Justice

We noted that there is no documentation of programming changes to the system prior to 2009, and also no operational documentation that is referenced, which will make the transfer of knowledge difficult.

We also found that there is no formal job description or any defined performance metrics and expected service levels in place to evaluate the consultant responsible for the system's performance.

Licensing System

The Licensing System is in a stronger position than the Court System with respect to the ongoing availability of trained staff because there continues to be vendor support for the key programming languages it uses and because it has a larger team. Twenty-four experts (10 staff and 14 consultants) support the Licensing System; their anticipated retirements are spread out over a number of years, allowing for more effective succession than is the case with the Court System. Further, management has thought about ways to facilitate knowledge transfer from retiring personnel to remaining employees.

However, we did note instances where problems occurred because support staff did not have the right skills to perform their job responsibilities. For example, in January 2016 the system went down temporarily (for about an hour) and was unavailable for front-line staff because multiple programmers had been working on making changes to the code at the same time, without knowing each other was doing so. This caused incorrect and incomplete code to be applied to the system, ultimately resulting in functions within the system being unavailable until programmers could fix it. There is functionality available in the existing tools supporting the Licensing System that could prevent this from happening but, at the time of our audit, staff did not know how to configure this tool in order for it to be used.

Tax System

In contrast to the Court System and Licensing System, we did not find issues of knowledge transfer and training with the Tax System and the I&IT Central Agencies cluster. This cluster is sufficiently staffed to manage anticipated turnover and retirements without jeopardizing knowledge transfer and the continued operation of the Tax System. We also noted that management has been facilitating additional training for staff so that they can assume duties previously performed by consultants, thereby reducing reliance on external parties.

4.3.2 Maintenance of Aging Systems is Insufficient

The government has taken steps to modernize some of its aging systems, however the modernization of the Court System and Licensing System has been significantly delayed. Because they were slated for replacement by 2011, funding for their maintenance was reduced significantly—to a level described to us by their I&IT cluster staff as "just enough to keep the lights on." Replacement of the systems was subsequently delayed (with no clear completion timeline for the Court System and a 2025 target for the Licensing System), but funding for their maintenance was not returned to previous levels.

Maintenance for these systems has been minimal, and restricted to levels that allow the ministries to meet only their legislative requirements, rather than enhance their service delivery. There have been limited functionality improvements to these systems.

4.3.3 Aging Systems Hinder Effective Service Delivery

The Court System and Licensing System, as aging systems, are experiencing functionality issues, such as:

- they are unable or have difficulties communicating with other systems;

- it is challenging to modify them to address the changing requirements of their users; and
- they do not readily generate reports that management needs for analyzing trends.

There is a concern that making changes to modules in these systems could corrupt functionality or cause the systems to crash. Because of the lack of reliable documentation of past system programming changes, programmers avoid making direct changes in the system that might actually be viable and help ministry employees and/or the public use the systems more effectively. Innovation is therefore not occurring because users, knowing the severe limitations of the systems, no longer request anything but the most essential changes.

We noted several examples where limitations with the Court System meant that user needs were not being met, including:

- categories (such as new criminal code offences) cannot be added easily in the system when new legislation is passed;
- the system cannot record cases that have multiple hearings over an extended period of time; and
- special instructions cannot be recorded in the system (for example, identifying the need for interpreters, listening devices for the hearing impaired, or other special equipment).

Staff currently track special instructions using workaround solutions, such as recording it in the "general notes" section or maintaining separate Excel documents that are not linked with the system. We also noted that in making fixes in the Court System, the programmers have themselves been entering actual data related to the court cases. This goes against best practice in computer management that system programming be kept separate from data entry. As a result, there is the risk that the programmers could inadvertently, or fraudulently, enter inaccurate data or alter existing data.

RECOMMENDATION 6

In order to mitigate the risk arising from using older and outdated I&IT systems, the I&IT cluster should revisit system replacement and modernization timelines and identify areas where these timelines could be escalated to ensure that I&IT systems continue to meet user needs.

Where the replacement of outdated I&IT systems cannot be escalated, appropriate strategies should be put in place to ensure that systems are sufficiently maintained and supported to mitigate the deterioration of system performance.

I&IT ORGANIZATION RESPONSE

The I&IT organization agrees with the Auditor General and acknowledges the importance of having a comprehensive inventory, lifecycle management and planning approach to ensure sufficient system maintenance and/or replacement.

To enable this, the I&IT organization has defined and established an Application Portfolio Management (APM) approach to address risks associated with aging systems and to inform application rationalization opportunities. I&IT will work with their respective ministry business partners to develop and submit plans through the annual Program Review, Renewal and Transformation (PRRT) exercise.

The I&IT organization will work with program areas to investigate long-term IT capital investment approaches for business and enterprise applications and will provide recommendations to Treasury Board/Management Board of Cabinet for any replacement of outdated I&IT systems.

4.4 Modernization Efforts Significantly Delayed

Although the government has initiated projects to replace some of its outdated I&IT systems, there is considerably more work to be done. In 2006, the Major Application Portfolio Strategy (MAPS) identified 77 of 153 major applications that needed to be replaced or upgraded. In the fiscal year ending March 31, 2010, the Treasury Board/Management Board of Cabinet authorized spending of $600 million to replace or upgrade these 77 applications. As of June 2016, 66 of these applications had either been retired or upgraded, including some significant projects, such as the Ontario Health Insurance Plan and Aircraft Tracking systems. However, we question whether $600 million would have been adequate to successfully address the needs of all 77 applications. By way of context, one project alone, the Social Assistance Management System (SAMS), although budgeted for $164.9 million, resulted in a total cost of $290 million. (See our *2015 Annual Report* for our value-for-money audit of SAMS.)

In 2012, the government moved responsibility for the replacement and upgrading of I&IT systems from a central team, which was managed by the Ministry of Government Services, to the individual I&IT clusters supporting the ministries. At the time the government had spent $121 million on MAPS. Of the remaining $479 million, $316 million was transferred to the relevant ministries that would ultimately have ownership of the modernized systems. The rest ($163 million) was retained by the Treasury Board. This was done due to a freeze on all capital expenditures by the government as part of the fiscal restraint measures at that time. It became evident that a significant investment in capital beyond the 2011 capital expenditure levels would be required to complete the MAPS projects. Therefore, the Treasury Board Secretariat decided to make the ministries rather than the Ministry of Government Services responsible for the outstanding and in-progress initiatives. By doing this, the Treasury Board hoped that the individual ministries would find funding from within their regular capital expenditure budgets to support the I&IT modernization projects. The process of upgrading and retiring outdated applications did continue within the clusters with significant upgrades made to the Integrated Financial Information System and the Ontario Student Assistance Program. However, we noted that 11 systems that MAPS had flagged as being overdue for replacement or upgrading still have not been modernized. These include the Court System and the Licensing System.

Court System and Licensing System

An unsuccessful attempt was made in September 2010 to initiate the modernization of the Court System as part of another I&IT project at the Ministry of the Attorney General, the Court Information Management System (CIMS). Although about $11 million was spent on CIMS, the project failed, resulting in no new system for that ministry. While the government was able to reallocate about $6.5 million worth of hardware and software to other operations, the project still lost about $4.5 million overall. The CIMS project was originally scheduled for completion in March 2012. Only nearing its expected completion was it revealed that the project was still in planning phase.

The two oversight bodies for the CIMS project were the Executive Steering Committee and the Office of the Corporate Chief Information Officer. Subsequent to March 2012, the Executive Steering Committee decided to put the project on hold until further review. The province's Internal Audit Division and a third party vendor conducted separate reviews. Based on these reviews, the project failure was attributed to the following issues:

- Governance and oversight processes failed to:
  1. identify risks and issues and steer the project in the right direction;
  2. adequately resolve issues identified;
  3. adequately monitor and supervise the performance of a key member of the project team (Functional Manager – who

was absent from meetings of the Executive Steering Committee 40% of the time); and
4. ensure that reporting requirements were met.

- Project management:
  1. lack of project planning, monitoring, supervision and co-ordination; and
  2. no evidence that deliverables as defined by the agreed upon Statement of Work had been completed or verified prior to authorization for payment to the vendor.
- Project reporting:
  1. project reports were incomplete, unreliable and inconsistently presented;
  2. project status was reported as 'on track' for seven of ten reports, which contradicted other indications that the project was experiencing delays and setbacks; and
  3. not all reports were presented to the Executive Steering Committee.

Since the failure of the CIMS project, no plan has been put in place that estimates when the Court System will be modernized. Revised timelines indicate that planning will begin in 2018/19, but no estimated completion date has been provided.

A business case for modernizing the Licensing System was submitted in 2008. It was approved in 2009 (as part of MAPS) with a budget of $230 million and estimated completion by 2016. In 2011, management revised their approach to roll out the project in three segments as opposed to modernizing the complete system in five years. The revised approval from Treasury Board for the first segment was $136 million, but the approved amount had to be revised again in 2014 to $190 million, and then again in 2015 to $195 million. This was due to poor performance from the external vendor, whose contract was terminated.

As of March 2016, $182 million had been spent on the first segment, now expected to be finished by the end of 2016, at an estimated cost of $203 million. The cluster has not yet done an assessment on the timelines and costs associated with the remaining two segments.

Delays in implementing the modernization of the Court System and Licensing System mean that by the time the I&IT clusters complete the planning for what they intend to do, the plan is already outdated.

Tax System

Vendor support for the current version of the Tax System's software will continue until 2018. Management is currently developing a business case to determine options for business requirements.

RECOMMENDATION 7

We recommend that the I&IT organization along with their respective ministries assess the cost and need to update and maintain current systems and the risks arising from using aged systems versus the costs and benefits of replacing these systems. Based on the assessments, review and revise the current five-year strategy plan released in 2016.

I&IT ORGANIZATION RESPONSE

The I&IT organization acknowledges the need to mitigate and address risk across the application environment and will work with Office of the Treasury Board and the Ministry of Infrastructure to determine options on how we should address the modernization and remediation of the application portfolio.

The I&IT organization will work with its respective ministry business partners to assess the cost and need to update and maintain current systems and the risks arising from using aged systems and develop and submit cost and benefit analyses for the replacement of any systems through the annual Program Review, Renewal and Transformation (PRRT) exercise.

Appendix: Detailed Observations of I&IT General Control Risk Areas for the Three Systems Reviewed

Prepared by the Office of the Auditor General of Ontario

1. Service-level Agreements	
A contract between the I&IT cluster management and ministries it serves should be established that formally and clearly sets out each party's roles and responsibilities for governance, accountability and expected performance and quality of service in accordance with the ministries' current and future needs.	
Court System	• No formal service level agreements in place covering the system • No service level agreements in place at the cluster level • No formal monitoring and reporting being performed over service levels
Licensing System	• No formal service level agreements in place covering the system • No service level agreements in place at the cluster level • No formal monitoring and reporting being performed over service levels
Tax System	• A formal service level agreement is in place covering the system • Service level agreements in place at the cluster level relating to only two systems; none for the other systems • No formal monitoring and reporting being performed over service levels
2. I&IT Human Resource Management	
Adequate staffing levels and skills should exist to ensure effective controls, maintenance and operations are achieved to meet expected service levels.	
Court System	• Inadequate support staff; over reliance on one external consultant and one in-house staff (eligible for retirement) for support • No formalized job descriptions in place for support staff responsibilities • No succession plan in place for replacement of experienced staff
Licensing System	• Adequate support staff–24 experts • Formalized job descriptions in place for support staff responsibilities • Appropriate succession planning in place for replacement of experienced staff
Tax System	• Adequate support staff–52 experts • Formalized job descriptions in place for support staff responsibilities • Appropriate succession planning in place for replacement of experienced and external staff
3. Logical Security	
Controls should exist to ensure only authorized users have access to and can use data, programs and networks. Examples of controls are user IDs and passwords to authenticate users and restricting access to systems.	
Court System	• 41% of the users had access to the system when their job roles did not require any access at all • Management has not reviewed user roles and access permissions on a regular basis to validate if these individuals still require access • Segregation of duties[1] are not regularly assessed and maintained • User activity logs are not reviewed on a regular basis • No formal process in place for creating and modifying users' access • No centralized list of authorized approvers who can request access on behalf of users
Licensing System	• 5% of the users had access to the system when their job roles did not require any access at all • Management has not reviewed user roles and access permissions on a regular basis to validate if these individuals still require access • Segregation of duties are not regularly assessed and maintained • User activity logs are not reviewed on a regular basis • A formal process is in place for creating and modifying users' access • A centralized list of authorized approvers who can request access on behalf of users does exist

3. Logical Security (continued)	
Tax System	• 5% of the users had access to the system when their job roles did not require any access at all • Management has not reviewed user roles and access permissions on a regular basis to validate if these individuals still require access • Segregation of duties are not regularly assessed and maintained • User activity logs are reviewed on a regular basis • A formal process is in place for creating and modifying users' access • A centralized list of authorized approvers who can request access on behalf of users does exist
4. I&IT Operations	
Activities and operational procedures required to support the delivery of I&IT services, including the execution of pre-defined standard operating procedures and the required monitoring activities, should be in place.	
Court System	• No post-batch[2] verification process in place • No formally documented I&IT operational procedures exist
Licensing System	• Post-batch verification processes are in place • Documented I&IT operational procedures exist
Tax System	• Post-batch verification processes are in place • Documented I&IT operational procedures exist
5. Change Management	
Controls should exist to ensure changes to key systems are made quickly, reliably and have minimal negative impact on the system's stability or integrity.	
Court System	• Formal change management procedures are in place, but system changes are taking more time and effort to implement due to system age and complexity • Programmers have access to make data changes.[3]
Licensing System	• Formal change management procedures are in place, but system changes are taking more time (approximately 66% longer) and effort to implement due to system age and complexity
Tax System	• Formal change management procedures are in place
6. Incident Management	
Controls should exist to ensure user queries and incidents (such as service interruptions) are resolved as soon as possible.	
Court System	• Poor quality of data pertaining to incidents • No operational logs, which provide vital information relating to I&IT operations, are maintained for the system • Support staff spend an unnecessary amount of time (60% of support calls) resolving very basic service requests
Licensing System	• Good data quality of incident records, but there is poor linkage between the incident records and the program change records addressing those incidents • Operational logs are maintained for the system • Support staff spend reasonable amount of time resolving basic service requests
Tax System	• Good data quality of incident records • Operational logs are maintained for the system • Support staff spend reasonable amount of time resolving basic service requests
7. Problem Management	
Controls should exist to ensure not only that there are as few operational issues as possible, but that the number of issues steadily decreases, thereby increasing system availability, improving service levels, reducing costs and improving customer convenience and satisfaction.	
Court System	• No formal problem management procedures (such as root cause analysis and trend analysis of incidents) are in place
Licensing System	• No formal problem management procedures are in place
Tax System	• No formal problem management procedures are in place

8. Availability and Capacity Management	
Controls should exist to ensure that the use of I&IT services is monitored, performance expectations are met and plans are made to predict and meet future user needs. This will enable services to be available whenever needed, resources to be managed efficiently and systems to be high-performing.	
Court System	• Adequate controls in place
Licensing System	• Adequate controls in place
Tax System	• Adequate controls in place
9. Business Continuity and Disaster Recovery	
Effective processes should exist to address unexpected events that disrupt operations (for example, power failures and IT system crashes) in order to restore or recover operations and information as quickly as possible.	
Court System	• Effective processes exist
Licensing System	• Effective processes exist
Tax System	• Effective processes exist

1. Segregation of duties involves breaking down tasks that might reasonably be completed by a single individual into multiple tasks so that one person is not solely in control, to decrease the likelihood of error or fraud. The traditional example is that the person who produces a cheque should not also be authorized to sign it.
2. A batch job is a system functionality used to process multiple transactions at the same time. Batch jobs are often run overnight when there is less activity on the system.
3. It is best practice in computer management that system programming be kept separate from data entry. Otherwise, there is the risk that the programmers could inadvertently—or fraudulently—enter inaccurate data or alter existing data.

Chapter 4
Section
4.04

The Nursing Retention Fund

1.0 Executive Summary

The Nursing Retention Fund (Fund) operated between 2005 and 2016. Its purpose was to retain nursing positions in Ontario public hospitals where a service change in a hospital, such as a reduction in programs or services or the closure of a unit, resulted in nurses being laid off. The Fund intended to accomplish this purpose by disbursing money to eligible hospitals for nurses' education and training, and nurses' salaries and benefits for up to six months while receiving this education and training.

The Fund was set up by the Province as a trust administered by a Management Committee (Committee) consisting of representatives from the Registered Nurses' Association of Ontario, the Registered Practical Nurses Association of Ontario and the Ontario Nurses' Association. The Province committed and transferred $40 million to an irrevocable trust at the time the Fund was established on March 31, 2005. This trust allowed the Province to record the transfer as an expense in the year the transfer was made.

When the Fund ended in 2016, it disbursed its remaining funds to the Registered Nurses' Association of Ontario and the Registered Practical Nurses Association of Ontario according to their proportionate membership of nurses, as required by the terms of the Fund Agreement (Agreement) between the Province and the Committee, and the Deed of Settlement, which governed the trust.

In our review of the Fund's operations, we noted the following:

- Although the Fund disbursed minimal funds to hospitals over its term—$577,812, representing only 1.4% of the $40 million committed—the Committee made its best efforts to promote awareness and keep the Fund in operation longer than its original term. The Committee administered the Fund in a satisfactory manner.
- However, certain factors limited hospital eligibility for funding, which resulted in such small disbursements:
  - Nurses had to be formally laid off and have a position to be bridged to in order for their hospitals to receive funding.
  - Skill-mix changes were not eligible for funding.
  - Some hospitals chose to adjust their numbers of nurses through other means, such as retirements and voluntary departures, which did not meet the requirement that nurses be issued layoff notices for the funds to be disbursed.
- The Fund incurred costs in its 10-year administration that included approximately $4.4 million in trustee administration fees, professional fees and operating expenses.

Trustee administration fees represented approximately $2.9 million of this total, or approximately 0.6% of the annual average balance of the Fund. We did not find any of these costs to be excessive.

- All fees were paid through investment income generated by the Fund.
- The intended use of the remaining fund balance is to provide funding for continued nursing education, which is in line with the original purpose of the Fund.

2.0 Background

2.1 What Was the Nursing Retention Fund?

The Nursing Retention Fund (Fund) was established by the Province on March 31, 2005. At the time, mass layoffs of nurses and other hospital workers were expected after the Province had ordered hospitals to balance their budgets. The Fund was developed to provide bridging for nurses in order to prevent permanent layoffs and thereby retain nurses. The nurse being bridged is a nurse who, following a layoff at his or her workplace, accepts an offer of enhanced retraining. The effect of this is to avoid being laid off permanently and then, consequently, be re-employed at the same hospital. The Fund would provide reimbursement to hospitals for the cost of education and/or training required to retain nurses, and salary continuance (wages/salary and benefits) for a period of up to six months while nurses attended education and/or training programs.

2.2 How Was the Fund Administered?

At the time the Fund was established, the Province transferred $40 million to a third-party-managed trust. The Fund Agreement (Agreement) between the Province and the Management Committee (Committee) set out the terms and conditions for the Committee to administer the Fund. The Committee comprised representatives from the Registered Nurses' Association of Ontario, the Registered Practical Nurses Association of Ontario and the Ontario Nurses' Association.

2.3 How Were the Fund's Assets Disbursed at Its Expiry?

The Fund was created as an irrevocable trust, which means that any unused funds would not be returned to the Province upon expiry of the Agreement. The Agreement required that upon expiration, any remaining unspent funds would be disbursed among the Registered Nurses' Association of Ontario and the Registered Practical Nurses Association of Ontario according to their proportionate membership of nurses.

The original agreement expired in 2010 and was subsequently extended to 2013 and then further extended to 2016, after which the funds were disbursed to the Registered Nurses' Association of Ontario and the Registered Practical Nurses Association of Ontario.

3.0 What We Looked At

Our objective during our review of the Nursing Retention Fund (Fund) was to establish whether the Fund was appropriately administered and to identify the reason for limited funding being paid from the Fund to the hospitals over the Fund's term.

We met with the Ministry of Health and Long-Term Care (Ministry). We also interviewed senior officials of the Registered Nurses' Association of Ontario, the Registered Practical Nurses Association of Ontario and the Ontario Nurses' Association.

We reviewed all agreements, meeting minutes of the Management Committee (Committee), correspondence between the Committee and the Province, marketing materials and details of disbursements to hospitals.

4.0 Key Observations

4.1 Limited Eligibility of Hospitals for Funding

Funding requested by and provided to hospitals by the Fund was exceptionally low, at $577,812, representing a mere 1.4% of the $40 million committed for this purpose. (**Figure 1** shows a detailed breakdown of the Fund since its inception.) This low funding level can be explained by the conditions surrounding the hospitals' eligibility to receive the funds, including the hospitals' own personnel policies.

Funding eligibility was established by the Committee in conjunction with the Ministry and formalized in the Agreement. It included, among several other criteria, the following three:

- Only nursing positions that received a layoff notice would be eligible for funding.
- Reimbursement to hospitals must be for the cost of education and/or training of a nurse who will then go into the position to which he or she is being bridged as a result of the layoff.
- Positions subject to skill-mix changes would not be eligible for funding.

In reducing staffing costs, if hospitals chose measures such as retirements and voluntary departures, this would not result in a formal layoff notice. In the absence of layoff notices, hospitals were not eligible for funding. Also, if layoff notices were issued, it was not mandated that hospitals apply to the Fund.

When a nurse is bridged as a result of a layoff, it means that the hospital will have a position for them once their training is complete. If the hospital chooses not to have a position for the nurse after the layoff, they would not be eligible to apply for the Fund.

A skill-mix change occurs when a hospital changes the classification of a nursing position, so that a nurse is replaced by a nurse from a different nursing category or by another health-care provider (such as a personal support worker) who has a different set of skills, competencies, knowledge and experience. Hospitals perform a skill-mix change in order to meet patient needs and/or to save costs. Since nursing salaries are influenced by skill level, knowledge, competence and experience, hospitals may have a financial incentive to replace higher-paid nursing positions with lower-paid nursing positions, or with other lower-paid health-care providers. If hospitals chose a skill-mix change, they were not eligible for funding.

Hospitals did not apply to the Fund as originally expected. The Committee commented to us that its members believed that hospitals facing budget pressures would have no choice but to start laying off staff and would then become eligible to utilize the Fund. However, it further noted that some hospitals did not have a nursing position available for the laid-off nurse to bridge to once training was completed; therefore, those hospitals were not eligible to apply to the Fund. Also, the Committee was surprised that some hospitals were able to reduce the number of their nurses through retirements and voluntary departures instead of layoffs.

4.2 Administration of Fund by Management Committee

The Committee met regularly to discuss the Fund's progress, review all submitted applications by hospitals, and report on funding activities to-date. In addition, the Committee undertook marketing activities to promote the Fund in an effort to ensure awareness among hospitals. This included creating and maintaining a website, advertising in relevant hospital and nursing newsletters and publications, sending letters to Chief Nursing Officers at hospitals (or equivalent role if not present in each hospital), and having displays and other promction at health-care expos.

As noted previously, the Fund provided only limited funding. The Committee facilitated the two Fund extensions in 2010 and 2013, in agreement with the Province, to encourage future disbursements.

Figure 1: Funding of the Nursing Retention Fund, 2005–2016

Prepared by the Office of the Auditor General of Ontario based on audited financial statements of the Nursing Retention Fund

Calendar Year	Opening Balance ($) (A)	Investment Income ($) (B)	Income Taxes ($) (C)	Trustee Fees ($) (D)	Professional Fees ($) (E)	Operating Fees ($) (F)	Amount Disbursed to Hospitals ($) (G)	Ending Balance ($) (A+B)–(C+D+E+F+G)
2005	40,000,000	817,057		192,153	2,120			**40,622,784**
2006	40,622,784	1,553,313	282,350	239,011	6,647			**41,648,089**
2007	41,648,089	1,771,484	1,104,724	241,008	7,362			**42,066,479**
2008	42,066,479	1,561,507	856,740	243,874	6,974			**42,520,398**
2009	42,520,398	420,196	402,720	218,246	10,730		423,626	**41,885,272**
2010	41,885,272	243,577	(404,511)	213,474	7,226	475,000	34,615	**41,803,045**
2011	41,803,045	500,008	(84,590)	259,814	8,934	260,000	10,572	**41,848,323**
2012	41,848,323	471,644	49,517	255,628	8,144	468,274	52,531	**41,485,873**
2013	41,485,873	465,172	(27,267)	257,450	9,085	200,000	56,468	**41,455,309**
2014	41,455,309	471,862	(43,631)	276,993	9,825			**41,683,984**
2015	41,683,984	342,709	31,635	253,729	10,177	70,000		**41,661,152**
2016	41,661,152	54,886		200,000[1]				**41,516,038**
Total[2]		**8,673,415**	**2,167,687**	**2,651,380**	**87,224**	**1,473,274[3]**	**577,812**	

1. A total of $200,000 was held back as at March 31, 2016 to pay all remaining fees as at the date of dissolution of the Trust.
2. Totals are not inclusive of general holdback of $200,000.
3. Operating fees include items such as marketing activities, website design and maintenance, liability insurance, and staffing and advisory services as required.

These efforts demonstrate that the Fund was appropriately administered by the Committee.

4.3 Financial Activities of the Fund

The Fund incurred costs in its 10-year administration that included approximately $4.4 million in trustee administration fees, professional fees and operating expenses. Trustee administration fees represented approximately $2.9 million of this total, or approximately 0.6% of the annual average balance of the Fund. We did not find any of these costs to be excessive.

All fees were paid through investment income generated by the Fund. At the time of the Fund's expiration, a total of $8.7 million of investment income had been earned since 2005, resulting in the Fund's net growth of $1.5 million after all income taxes, administrative costs and disbursements to hospitals were paid.

As per **Figure 1**, the original funding was $40 million in 2005. Upon the Fund's expiry in 2016, the remaining fund balance available for disbursement was $41.5 million.

4.4 Final Fund Disbursement

When the Fund expired on March 31, 2016, the $41.5 million total of remaining assets in the Fund was disbursed as specified in the Agreement.

The Agreement specified that any remaining funds were to be allocated to the Registered Nurses' Association of Ontario and to the Registered Practical Nurses Association of Ontario based on their proportionate membership (76% and 24%, respectively). These two associations, in conjunction with the Ontario Nurses' Association, agreed to contribute a combined total of $12 million from the remaining funds to form the Nurse Health Program. This program is a collaborative effort between the Registered Nurses' Association of Ontario, the Registered Practical Nurses Association of Ontario, the Ontario Nurses' Association and the College of Nurses of Ontario. **Figure 2** shows how these funds were allocated.

The Nurse Health Program is intended to provide education and outreach focused on prevention and increased awareness of the mental health and substance abuse issues experienced by some nurses. Furthermore, it will facilitate the creation of supportive workplaces for affected nurses who return to nursing practice.

In collaboration with Ontario Nurses' Association, the Registered Nurses' Association of Ontario has created a segregated endowment fund called the Ontario Nursing Practice, Education and Research Endowment. Its purpose is to fund nursing education and research related to innovation in nursing practice, and to improve nursing programs in the Province.

The Registered Practical Nurses Association of Ontario has announced that it will use its portion of the funds to implement the Registered Practical Nurses Innovation Fund. Its purpose is to support the retention and continuing professional development of Registered Practical Nurses in Ontario. Initial plans are to distribute the funds over approximately 14 years to provide Registered Practical Nurses with access to targeted educational programs, and with non-tuition-related support for attending educational programs. Such support could help these nurses with travel costs, time away from work and other expenses.

The intended use of the remaining fund balance is in line with the original purpose of the Fund, as outlined in the Deed of Settlement, by allowing for funding for continued nursing education.

Figure 2: Allocations from Final Nursing Retention Fund Disbursement

Prepared by the Office of the Auditor General of Ontario

Allocated to	$ million
Nurse Health Program	12.0
Registered Nurses' Association of Ontario	22.4
Registered Practical Nurses Association of Ontario	7.1
Total	**41.5**

Chapter 5

Review of Government Advertising

Significant Changes to *Government Advertising Act, 2004* Lead to More Publicly Funded Partisan Advertising

Ontario enacted the *Government Advertising Act, 2004* (Act) more than a decade ago to ensure that no public money would pay for advertising that gives the government a partisan advantage. The Act required the Auditor General to review most government advertising and, in cases where we deemed it not partisan, to issue a formal approval before the item could be used. The Act also set out standards to guide this work, and gave the Auditor General discretionary authority to determine what is partisan.

The Act remained unchanged until last year, when the government enacted significant amendments that weakened the Act and opened the door to publicly funded partisan and self-congratulatory government advertising on television and radio, in print and online.

It is noteworthy that Ontario weakened its Act, the first such legislation in the world, just as other Canadian jurisdictions are seeking to tighten limits on partisan government advertising.

In May 2016, for example, the federal government introduced interim regulations, which took effect immediately, requiring its departments to submit proposed advertisements valued at more than $500,000 for review by Advertising Standards Canada, a national not-for-profit organization that administers the Canadian Code of Advertising Standards.

The new regulations require federal-government advertising to be objective, factual, and explanatory, and to refrain from using the name, voice or image of a minister, MP or senator. The federal government also asked the Auditor General of Canada to conduct an audit of this review process to evaluate its effectiveness, and plans eventually to draft legislation enshrining the new regulations.

Also in May 2016, a British Columbia opposition party introduced a bill in the legislature modelled on the previous Ontario *Government Advertising Act*.

The amendments last year to the Ontario Act did away with the Auditor General's discretionary authority under the original Act, providing instead a specific and narrow definition of what is partisan. This definition is the only measure we can use in our reviews.

We believe that as a result of the amendments, Ontarians have in the last year paid millions of dollars for advertising designed primarily to present the government in a positive light rather than to inform. (We provide examples further in this section.)

An approval from the Auditor General is still required under the amended Act before an advertisement can run. However, this approval has become a foregone conclusion because the amended Act stipulates that an advertisement is partisan **only if**:

- "it includes the name, voice or image of a member of the Executive Council or a member of the Assembly, unless the item's primary target audience is located outside of Ontario;
- "it includes the name or logo of a recognized [political] party ...;
- "it directly identifies and criticizes a recognized party or a member of the Assembly; or
- "it includes, to a significant degree, a colour associated with the governing party ..."

The government also repealed standards in the original Act that stipulated each item submitted to our Office had to be a reasonable means of:

- informing people about government programs, policies and services;
- informing people about their rights and responsibilities;
- changing social behaviour in the public interest; or
- promoting Ontario as a good place in which to live, work, invest, study or visit.

We found the old standards useful and effective in our review process to promote transparency and accountability in government advertising. These standards also helped ensure that items provided useful information and did not unduly promote the governing party or criticize its opponents.

We urged the government last year to reconsider the amendments, and we issued a Special Report (**www.auditor.on.ca/en/content/specialreports/specialreports/GAA_en.pdf**) outlining our detailed concerns. We noted that the proposed amendments could lead to government advertising that would meet the requirements of the Act, but still be considered partisan by any reasonable measure. This type of advertising, we wrote, would be of little value to the taxpayers who paid for it.

We also advised that the amendments could damage the credibility of the Auditor General as an independent Legislative Officer working at arm's length from the government because the amended Act would require our Office to "rubber stamp" all government advertising as non-partisan.

The government nonetheless enacted the amendments, which took effect on June 16, 2015. Since then, our Office has had to approve advertising in the areas of pensions, the environment, infrastructure, health and education that we believe had as their primary purpose to promote the government's partisan political interests or give the government credit for its accomplishments, rather than to inform citizens. We present examples below.

Pension Ads Overlapped with Ontario Liberal Party Ads

Less than a month after the new Act took effect, we had to approve as compliant with the Act a radio and digital advertising campaign from the Ministry of Finance on the Ontario Retirement Pension Plan (ORPP), a signature government policy introduced in the 2015 Budget. A few weeks later, while these advertisements were still running, the Ontario Liberal Party launched a television advertisement in which the Premier spoke about ensuring that Ontarians have a decent pension on which to retire.

Under the original Act, we could have addressed the overlap between the publicly funded advertisements and the political-party commercials by requiring the government to pull its commercial so as to avoid spending tax dollars to reinforce the partisan messaging of the Ontario Liberal Party spot. We would also have had the authority to disallow the Ministry of Finance item in the first place because it claimed the ORPP was "here" when, in fact, it was only scheduled to begin operating in 2017.

In August 2015, the government submitted three TV spots on the ORPP that, as with the previous submission, we had to approve under the amended legislation. However, we noted our significant concerns about their content and timing.

We found that the ads could leave the impression that the ORPP will in fact close the retirement savings gap rather than just "help shrink" it, which could be misleading. We also noted that the ads could be seen as partisan because they aired during a federal election campaign that included verbal

disagreements between the Liberal Premier and the Conservative Prime Minister over the ORPP.

The government spent more than $5.7 million to advertise the ORPP in the 2015/16 fiscal year. However, it scrapped its plans to create the ORPP in June 2016 after reaching an agreement with the federal government on changes to the Canada Pension Plan (CPP). In total, it spent up to $8.1 million to advertise the ORPP over the past two fiscal years.

In July 2016, the government submitted a radio ad, and later digital ads, promoting benefits of the proposed CPP enhancements. We expressed concerns that the subject matter of the ads was beyond the Ontario government's jurisdiction, that the proposed changes to the CPP were still subject to federal parliamentary approval and, if passed, would not take effect until 2019. We noted that the ads were self-congratulatory and aimed at ensuring that the provincial government got credit for CPP changes to come, rather than providing the public with any useful information. We would have rejected these ads under the previous Act. However, the amended Act required us to approve them as being in compliance with the legislation.

Environmental Advertising Self-Congratulatory, Misleading

The government spent nearly $3 million in 2015/16 (and projected to spend another $2.85 million more in 2016/17) on a series of ad campaigns on the environment that could be seen as self-congratulatory and, in some cases, misleading.

One commercial, submitted in November 2015, depicted animals that an announcer addressed as "fellow Ontarians." We had to approve the commercial as being in compliance with the standards of the amended Act. However, we also advised the government that this ad suggested the animals represent the electorate and they are "responding enthusiastically" (as described in the script) to the actions taken/to be taken by the government regarding the environment.

We also observed that a digital campaign, submitted in March 2016 promoting the government's contemplated cap-and-trade program, was misleading in that it conveyed the sense that a cap-and-trade program was already in place when in fact the program was tentatively to be launched in 2017. Although we had to approve the advertisements, we also advised that they left the overall impression that industry will be financing the program, even though the Ontario consumer will bear most of the cost through increased home heating, electricity and fuel costs.

In May 2016, we had to approve as compliant with the legislation two television campaigns on climate change that featured a well-known Canadian environmentalist and young children. We advised the government that the campaigns provided viewers with no useful information, and we noted that one of the spots appeared designed to create apprehension about the effects of climate change so viewers will be more likely to support Ontario's Climate Change Action Plan. We also noted that both campaigns fostered a positive impression of the government party.

Government Appears to Seek Credit in 2016 Ads

We had to approve as compliant with the legislation three campaigns that straddled the 2015/16 and 2016/17 fiscal years, and for which complete information about costs was not yet available. All three appeared designed primarily to give the government credit for its accomplishments, and we describe them below:

- **A campaign to promote "Ontario's nearly $160 billion investment in infrastructure."** In having to approve this campaign as compliant with the legislation, we advised the government that none of the proposed advertisements mentioned the fact that this spending will be spread over the next 12 years—a period in which there could be at least three provincial elections that could alter

this spending plan, as well as any number of other unanticipated economic developments. We also observed that the government's own submission for the advertisements noted that polling indicates less than 50% of Ontarians have any familiarity with the government's investment in public infrastructure. This led us to believe that the overall thrust of these advertisements was self-congratulatory and aimed at ensuring that the government gets credit for its potential future spending plans.

- **A campaign to tell Ontarians that the government is increasing health-care funding by $1 billion in the current fiscal year.** In its submission for these print and radio ads, we noted that the government cited "survey results showing that many Ontarians believe that severe cuts are happening within the health-care system." In reviewing and having to approve these ads as compliant with the legislation, we noted that the campaign appeared to be self-congratulatory and aimed at ensuring that the government gets credit for its planned health-care spending. We also advised the government that these advertisements would not have passed under the previous Act because we would have determined that a primary objective of these advertisements is to foster a positive impression of the governing party, rather than provide the public with useful information.
- **A campaign to promote the fact that Ontario schools provide "a world-class education" and that "more Ontario students are reaching their potential than ever before."** In having to review and approve the submission as compliant with the legislation, we advised the government that these vague scripts would not have passed under the previous Act because they appeared aimed at fostering a positive impression of the government and did not provide the public with any useful information.

Other Issues

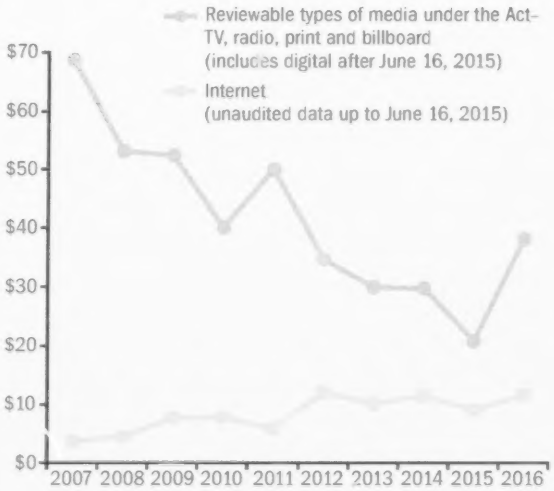
Digital Advertising Loopholes

Since 2011, we have asked the government to include all digital advertising in our review mandate. A new regulation under the amended Act does give us the authority to review "an advertisement consisting of video, text, images or any combination of these that a government proposes to pay to have displayed on a website."

However, this regulation specifically exempts advertisements on social media websites, including Facebook, Twitter, Instagram, etc., and advertisements displayed on a website by search-marketing services such as Google AdWords. In the fiscal year ending March 31, 2016, the government spent just over $3.78 million on digital ads that were exempt from our review. Our Office continues to have no authority to ensure this spending is for non-partisan purposes. (See **Figure 1** for total government spending on digital advertising). Since the amended Act added digital ads to our review mandate, the number of ads we examine yearly has nearly doubled, but we have to provide a "rubber

Figure 1: Advertising Expenditures, 2007–2016 ($ million)

Source of data: Office of the Auditor General of Ontario/ Advertising Review Board


Reviewable types of media under the Act– TV, radio, print and billboard (includes digital after June 16, 2015)
Internet (unaudited data up to June 16, 2015)
$70
$60
$50
$40
$30
$20
$10
$0
2007 2008 2009 2010 2011 2012 2013 2014 2015 2016

stamp" approval because we are approving the ads for compliance with legislation and cannot withhold approval based on partisanship.

As such, because we are merely "shuffling paper" now, the addition of digital media to our review authority is not meaningful in light of the legislated limits on our ability to determine what constitutes a partisan advertisement.

Government-Friendly Advertising by Crown Corporations

Provincial Crown corporations and agencies also spend millions to advertise, but unlike government ministries, these organizations are not subject to our review under the Act. We believe this has the potential to allow the government to benefit from favourable advertising by these exempt organizations.

In September 2015, the provincially owned Ontario Power Generation (OPG) announced it was launching a new "public awareness campaign called Powering the Future, which highlights the company's transformation to Ontario's clean power generator."

The television, print and digital campaign, which ran in fall 2015 and spring 2016 at a cost of more than $3 million, portrayed the province's move away from coal-fired electricity production in glowing terms. The last coal-fired plant in Ontario was closed in 2014 and the environment was benefitting as a result, the campaign said.

However, a complaint was made to Advertising Standards Canada that the TV commercial was misleading because it said that 99% of the power produced in Ontario is free of greenhouse gas emissions; in fact, Ontario still depends on gas-powered plants to generate some power. Although the ad campaign has stopped airing on TV, OPG has changed the spot available on-line to clarify that it is OPG-generated power that is 99% free of emissions.

The suggestion that a government might benefit from advertising paid for by a Crown corporation warrants further discussion because such advertising can constitute publicly funded partisan advertising.

Election Advertising

The Legislature's Standing Committee on General Government held hearings over the spring and summer into Bill 201, the *Election Finances Statute Law Amendment Act*, a proposed law to impose new restrictions and rules on political advertising by political parties and third parties during pre-election and election periods.

Bill 201 was proposing to limit the amount that a political party and a third party could spend in the six months preceding an election. Political parties could spend $1 million and third parties $600,000. Third parties would also be limited to spending$100,000 during the election period itself. However, it was unclear whether government advertising fell under the definition of political advertising and thus would be bound by the limits imposed on third parties.

I appeared before the Committee on August 11, 2016, and raised the possibility that Bill 201 did not restrict the government from spending millions of public dollars on advertising that would allow the government to have a partisan advantage.

I recommended that to address this, the government should reinstate the discretionary powers of the Auditor General in the Act to ensure that government advertising, especially prior to and during an election campaign, does not give the governing party a partisan advantage.

When the Legislature prorogued on September 8, 2016, Bill 201 died on the Order Paper. A new election finance reform bill, Bill 2, was introduced on September 13. It included a change from the previous version regarding government advertising: It proposed that 60 days before a scheduled election period, government advertising would be limited to only those ads communicating essential information (e.g., public health warnings). The same rule would apply during the campaign period.

I submitted a written presentation to the legislative committee hearings for Bill 2 in November 2016, reiterating my view that unless my discretionary powers in the former Act were reinstated, the

Figure 2: Expenditures for Reviewable Advertisements under the *Government Advertising Act, 2004*, April 1, 2015–March 31, 2016*

Source of data: Ontario government ministries/Advertising Review Board

Ministry	# of Submissions	# of Items	Agency Fees ($)	Production Costs ($)	Media Costs ($)					Total ($)
					TV	Radio	Print	Out-of-Home[1]	Digital	
Aboriginal Affairs	1	1	–	–	–	–	650	–	–	650
Agriculture, Food and Rural Affairs	9	128	164,866	592,312	1,004,161	751,516	28,920	123,264	150,242	2,815,281
Attorney General	1	2	97	3,239	–	–	–	–		3,336
Children and Youth Services	1	4	–	15	–	–	–	–	21,455	21,470
Citizenship, Immigration and International Trade	16	159	308,626	646,543	2,635,486	–	298,346	1,802,262	595,082	6,286,345
Community Safety and Correctional Services	6	11	–	36,694	22,542	–	33,194	–	–	92,430
Economic Development, Employment and Infrastructure	11	41	66,320	31,903	–	86,194	392,055	150,168	220,106	946,746
Education	14	97	429,138	634,563	1,138,910	462,790	1,905,579	–	501,183	5,072,163
Environment and Climate Change	7	80	402,304	580,296	1,205,245	–	–	321,760	429,753	2,939,358
Finance	15	162	754,624	947,530	3,447,272	1,338,512	641,392	–	947,459	8,076,789
Government and Consumer Services	20	45	6,222	22,014	783,867	–	14,751	–	76,476	903,330
Health and Long-Term Care	29	251	144,208	1,177,143	2,381,780	1,418,953	918,344	1,765,784	2,022,141	9,828,353
Labour	5	46	111,255	12,930	–	807,627	195,708	–	–	1,127,520
Municipal Affairs and Housing	0	0	–	–	–	–	13,900	–	–	13,900[2]
Natural Resources and Forestry	33	132	–	10,644	–	28,355	229,923	2,960	160,350	432,232
Tourism, Culture and Sport	46	94	679	92,799	18,216	77,463	545,884	226,034	214,665	1,175,740
Training, Colleges and Universities	0	0	–	–	(2,580)[3]	198	(5,301)[3]	–	–	(7,683)[3]
Transportation	15	131	210,240	635,330	48,079	689,475	1,099,283	1,111,368	131,536	3,925,311
Total	**229**	**1,384**	**2,598,579**	**5,423,955**	**12,682,978**	**5,661,083**	**6,312,628**	**5,503,600**	**5,470,448**	**43,653,271**

* The *Auditor General Act* requires our Office to report annually on expenditures for advertising and printed matter reviewable under the Act. In order to verify completeness and accuracy, we may review selected payments and supporting documentation. We can also examine compliance relating to the sections of the Act dealing with submission requirements and use of ads during the Auditor General's review.

1. Includes billboards, transit posters, digital screens, cinema ads, etc.
2. Ads approved in 2014/15 and paid for in 2015/16.
3. Negative total due to media credits being applied.

Note: The ministries of Community and Social Services, Energy, Northern Development and Mines, and Research and Innovation did not incur any reviewable advertising costs under the Act.

governing party, through its use of government advertising, would continue to have a partisan advantage.

Government Advertising Spending on the Rise

In the fiscal year ending March 31, 2016, we reviewed 1,384 final advertising items in 229 submissions. This includes 26 preliminary review submissions comprising 111 advertisements which were at an early stage of development. The value of this government advertising was nearly $43.65 million. Excluded from this total is the $3.78 million spent on digital advertising that is exempt from our review (this includes ads placed on social media websites and ads displayed as a result of using a search marketing service) and $2.49 million the government spent on digital advertising in the first three months of the fiscal year, prior to the changes in the Act. Including these amounts, the total value of government advertising for the fiscal year was $49.9 million.

See **Figure 2** for a breakdown of costs by government ministry, and **Figure 3** for a breakdown of spending by medium.

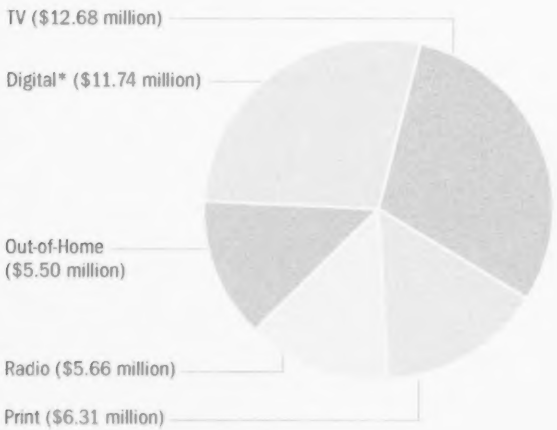
This compares to 653 individual items in 182 submissions with a value of $20.85 million in the previous fiscal year. Although digital advertising was not reviewable by our Office, the government spent $9.16 million on digital ads. In total, the government spent just over $30 million on advertising in the fiscal year ending March 31, 2015. **Figure 4** shows a breakdown of government advertising costs since 2010. Since the changes to the Act came into effect last June, government spending on advertising has increased.

The substantial increase from last year is partly attributable to the inclusion of some types of digital ads to our review mandate, but is likely due to the running of more ads that would not have been approved by our Office under the previous version of the Act.

The top 10 advertising campaigns in 2015/16 by expenditure are listed in **Figure 5**. These 10 campaigns accounted for almost 79% of the total reviewable expenditure on advertisements that our Office reviewed in the past fiscal year. It is worth noting that the ORPP and Climate Change ad campaigns would not have passed our review prior to the 2015 amendments to the Act.

Figure 3: Advertising Expenditure by Medium, 2015/16

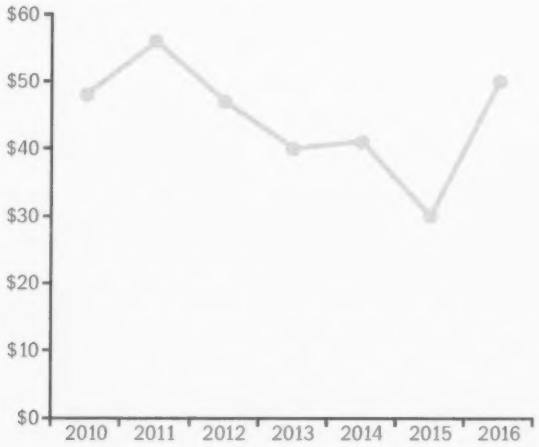
Source of data: Ontario government ministries/Advertising Review Board



* Includes costs of all digital advertising (including $6.27 million that is exempt from our review).

Figure 4: Advertising Expenditures, 2010–2016 ($ million)*

Source of data: Office of the Auditor General of Ontario/ Advertising Review Board



* These yearly expenditures include digital advertising.

Figure 5: Top 10 Advertising Campaign Expenditures for 2015/16[1]
Source of data: Ontario government ministries/Advertising Review Board

Campaign[2]	Ministry	Expenditure ($ million)
ORPP	Finance	5.73
Sexual Violence and Harassment	Citizenship, Immigration and International Trade	5.61
Health and Physical (Sexual) Education	Education	4.95
Pan Am/Parapan Am Traffic Management	Transportation	3.66
Climate Change	Environment and Climate Change	2.94
Foodland Ontario	Agriculture, Food and Rural Affairs	2.79
Smoking Cessation	Health and Long-Term Care	2.61
Ontario Savings Bonds	Finance	2.28
Healthy Kids Community Challenge	Health and Long-Term Care	1.68
Immunization	Health and Long-Term Care	1.45
Total		**33.70**

1. Campaign expenditures include digital advertising costs incurred after June 16, 2015.
2. Elements of this may include TV, print, radio, out-of-home, and/or digital advertising.

The amended Act requires us to render a decision on compliance with the legislation within five business days. Although the time required for a decision varies because of other work priorities, the average turnaround time during the past fiscal year was 3.3 business days. The amended Act requires us to render a decision on compliance with the legislation on preliminary reviews in nine business days, but our average turnaround time last fiscal year was just over three business days.

Two Violations under the Amended Act

We found all advertising submitted to our Office in the 2015/16 fiscal year complied with the amended Act, with the exception of two preliminary review submissions.

The first violation, from the Ministry of Economic Development, Employment and Infrastructure, involved a television script about the government's infrastructure-spending plans (discussed previously). We found it violated the Act because the advertisement directed viewers to a web page that contained the name and image of the Premier, in violation of Section 6(2)(a) of the revised Act.

The Ministry subsequently changed the web page and resubmitted the commercial, and we issued a compliance-with-legislation approval for the amended advertisement under the revised Act.

The second violation, by the Ministry of the Environment and Climate Change, involved a television script for the government's Climate Change campaign that failed to include a statement saying the ad was paid for by the Government of Ontario, as required in Section 6(1)1 of the revised Act.

Overview of Our New Compliance Function

What Falls under the Act

The Act applies to advertisements that government offices—specifically, government ministries, Cabinet Office and the Office of the Premier—propose to pay to have published in a newspaper or magazine, displayed on a billboard, displayed digitally in a prescribed form or manner, or broadcast on radio or television, or in a cinema. It also applies to printed matter that a government office proposes

to pay to have distributed to households in Ontario by bulk mail or another method of bulk delivery. Advertisements meeting any of these definitions are known as "reviewable" items and must be submitted to our Office for review and approval for compliance with the amended Act before they can run.

In addition, all proposed television and cinema commercials, along with bulk-distributed printed materials (householders) must be submitted before they are completed for preliminary review by our Office for compliance with legislation in each language the government intends to run them. After receiving a preliminary approval, these proposed advertisements must be resubmitted in their final form for approval. (Under the old Act, preliminary reviews were voluntary and could be submitted in a single language. This was a more efficient and streamlined process.)

The Act requires government offices to submit reviewable items to our Office. They cannot publish, display, broadcast, or distribute the submitted item until the head of that office (usually the deputy minister) receives notice, or is deemed to have received notice, that the advertisement has been approved for compliance with legislation.

If our Office does not render a compliance decision within the five business days set out in regulation, then the government office is deemed to have received notice that the item is in compliance with the Act, and may run it.

If our Office notifies the government office that the item is not in compliance with the Act, the item may not be used. However, the government office may submit a revised version of the rejected item for another review. Compliance approvals are valid for the life of the proposed media campaign.

The Act excludes from our review advertisements for specific government jobs (but not generic recruitment campaigns) and notices to the public required by law. Also exempt are advertisements on the provision of goods and services to a government office, and those regarding urgent matters affecting public health or safety.

Revised Criteria for Proposed Advertisements

In conducting its review, the Auditor General's Office now only determines whether the proposed advertisement is in compliance with the amended Act. The following are the areas that the advertisement must be in compliance with:

1. It must include a statement that it is paid for by the government of Ontario.
2. It must not include the name, voice or image of a member of the Executive Council or of a member of the Assembly, unless the item's primary target audience is located outside of Ontario.
3. It must not include the name or logo of a recognized party.
4. It must not directly identify and criticize a recognized party or a member of the Assembly.
5. It must not include, to a significant degree, a colour associated with the governing party.

We have no authority to consider any other factors, such as factual accuracy, to determine whether an item is partisan.

Other Review Protocols

Since assuming responsibility for the review of government advertising in 2005, our Office has worked with the government to clarify procedures to cover areas where the Act is silent. What follows is a brief description of the significant areas that have required such clarification over the years.

Websites

Although websites were not specifically reviewable in the original Act, we took the position that a website or similar linkage used in an advertisement is an extension of the advertisement. Following past discussions with the government, our Office came to an agreement soon after the legislation was first passed that the first page, or "click," of a website cited in a reviewable item would be included in our review.

We consider the content only of the first click, unless it is a gateway page or lacks meaningful content, in which case we review the next page. We examine this page for any content that may not meet the standards of the amended Act. For example, the page must not include a minister's name or photo.

Social Media

The government significantly increased its presence on social-media sites over the years, and our Office often receives advertisements for approval that use icons pointing to various social-media sites.

Although the original Act was silent on social media, we reached an agreement with the government that we would perform an initial scan of any social-media channel cited in an advertisement to ensure that the standards of the Act are being followed. We do, however, recognize that content on these networks changes frequently and can at times be beyond the control of the government office, so our limited review focuses only on the content that the government controls.

Third-Party Advertising

Government funds provided to third parties are sometimes used for advertising. The government and our Office agreed in 2005 that third-party advertising must be submitted for review if it meets all three of the following criteria:

- A government office provided the third party with funds intended to pay part or all of the cost of publishing, displaying, broadcasting or distributing the item.
- The government granted the third party permission to use the Ontario logo or another official provincial visual identifier in the item.
- The government office approved the content of the item.

This agreement currently remains in place. In the last fiscal year, our Office received 19 ads for review from the Ministry of Natural Resources and Forestry on a campaign done in partnership with Forests Ontario (a non-profit organization supporting forest restoration and stewardship) regarding the 50-Million-Tree Program that would constitute third-party advertising.

Chapter 6

The Standing Committee on Public Accounts

Role of the Committee

The Standing Committee on Public Accounts (Committee) is empowered to review and report to the Legislative Assembly its observations, opinions and recommendations on reports from the Auditor General and on the Public Accounts. These reports are deemed to have been permanently referred to the Committee as they become available. The Committee examines, assesses and reports to the Legislative Assembly on a number of issues, including the economy and efficiency of government and broader-public-sector operations, and the effectiveness of government programs in achieving their objectives.

Under sections 16 and 17 of the *Auditor General Act*, the Committee may also request that the Auditor General examine any matter in respect of the Public Accounts or undertake a special assignment on its behalf.

The Committee typically holds hearings throughout the year when the Legislature is in session relating to matters raised in our Annual Report or in our special reports and presents its observations and recommendations to the Legislative Assembly.

Appointment and Composition of the Committee

Members of the Committee are typically appointed by a motion of the Legislature. The number of members from any given political party reflects that party's representation in the Legislative Assembly. All members except the Chair may vote on motions, while the Chair votes only to break a tie. The Committee is normally established for the duration of the Parliament, from the opening of its first session immediately following a general election to its dissolution.

In accordance with the Standing Orders of the Legislative Assembly and following the June 2014 election, Committee members were appointed on July 16, 2014. The Chair and Vice-chair were elected on October 22, 2014 at the Committee's first meeting. The membership has changed twice since July 16, 2014 up to September 13, 2016 as follows:

- Ernie Hardeman, Chair, Progressive Conservative (July 16, 2014–present)
- Lisa MacLeod, Vice-chair, Progressive Conservative (July 16, 2014–present)
- John Fraser, Liberal (July 16, 2014–present)
- Percy Hatfield, New Democrat (July 16, 2014–present)
- Monte Kwinter, Liberal (September 13, 2016–present)

- Harinder Malhi, Liberal
  (July 16, 2014–present)
- Peter Milczyn, Liberal
  (April 5, 2016–present)
- Julia Munro, Progressive Conservative
  (July 16, 2014–present)
- Arthur Potts, Liberal
  (July 16, 2014–April 5, 2016; September 13, 2016–present)
- Chris Ballard, Liberal
  (April 5, 2016–September 13, 2016)
- Han Dong, Liberal
  (July 16, 2014–April 5, 2016)
- Lou Rinaldi, Liberal
  (July 16, 2014–September 13, 2016)

Auditor General's Advisory Role with the Committee

In accordance with section 16 of the *Auditor General Act*, at the request of the Committee, the Auditor General, often accompanied by senior staff, attends Committee meetings to assist with its reviews and hearings relating to our Annual Report, Ontario's Public Accounts and any special reports issued by our Office.

Committee Procedures and Operations

The Committee may meet weekly when the Legislative Assembly is sitting and, with the approval of the House, at any other time of its choosing. All meetings are open to the public except for those dealing with the Committee's agenda and the preparation of its reports. All public Committee proceedings are recorded in Hansard, the official verbatim report of debates, speeches and other Legislative Assembly proceedings.

The Committee identifies matters of interest from our Annual Report and our special reports and conducts hearings on them. It typically reviews reports from the value-for-money chapter and follow-up chapter of our Annual Report. Normally, each of the three political parties annually selects three audits or other sections from our Annual Report for Committee review.

At each hearing, the Auditor General, senior staff from her Office and a Research Officer from the Legislative Research Service brief the Committee on the applicable section from our Report. A briefing package is prepared by the Research Officer that includes the responses of the relevant ministry, Crown agency or broader-public-sector organization that was the subject of the audit or review. The Committee typically requests senior officials from the auditee(s) to appear at the hearings and respond to the Committee's questions. Because our Annual Report deals with operational, administrative and financial rather than policy matters, ministers are rarely asked to attend. Once the Committee's hearings are completed, the Research Officer prepares a draft report pursuant to the Committee's instructions. The Committee reports on its conclusions and makes recommendations to the Legislative Assembly.

Every year the Clerk of the Committee also requests those auditees that were not selected for hearings to provide the Committee with an update of the actions taken to address our recommendations and other concerns raised in our reports.

Meetings Held

The Committee held 24 meetings between September 2015 and August 2016. Topics addressed at these meetings included Metrolinx, Toward Better Accountability, the Province's Healthy Schools Strategy, Community Care Access Centres, ServiceOntario, Hydro One, Ontario's Public Accounts, Cancer Screening Programs,

Infrastructure Ontario's Loans Program, and Education of Aboriginal Students. Many of these meetings included hearings in which government and broader-public-sector witnesses were called to testify before the Committee and respond to questions regarding observations contained in our reports. Other meetings were spent on Committee business, writing the Committee's reports, or hearing briefings from the Auditor General. Also during this time, there were three special reports released, resulting from motions passed by the Committee asking the Auditor General to conduct audits (special reports). The following three special reports were tabled in the Legislature:

- September 23, 2015: Community Care Access Centres—Financial Operations and Service Delivery
- May 18, 2016: Government Payments to Education-Sector Unions
- June 8, 2016: 2015 Pan Am/Parapan Am Games

Reports of the Committee

The Committee issues reports and letters on its work for tabling in the Legislative Assembly. These reports and letters summarize the information gathered by the Committee during its meetings and include the Committee's comments and recommendations. Once tabled, all committee reports and letters are publicly available through the Clerk of the Committee or online at **www.ontla.on.ca**, as well as on our website at **www.auditor.on.ca**.

Committee reports typically include recommendations and a request that management of the ministry, agency or broader-public-sector organization provide the Committee Clerk with responses within a stipulated time frame. As of September 30, 2016, the Committee was in the process of drafting four reports and tabled the following six reports in the Legislature since our last report on its activities:

- November 23, 2015: Cancer Screening Programs
- November 24, 2015: Smart Metering Initiative
- March 22, 2016: Education of Aboriginal Students
- April 5, 2016: Public Accounts of the Province
- June 7, 2016: ServiceOntario
- June 7, 2016: Metrolinx—Regional Transportation Planning

Four of the six reports tabled by the Committee were on follow-ups completed by our Office in our *2014 Annual Report* and *2015 Annual Report* where the Committee called witnesses to discuss how they have progressed on our recommendations. The Committee report tabled on November 24, 2015, addressed our 2014 value-for-money audit on the province's Smart Metering Initiative, and the Committee report tabled on April 5, 2016, addressed Chapter 2 of our *2014 Annual Report* on the Public Accounts of the Province.

In Volume 2 of our Annual Report, we have included our follow-ups on the recommendations the Committee made in the final five reports that were tabled in 2015 (Financial Services Commission of Ontario—Pension Plan and Financial Service Regulatory Oversight; Infrastructure Ontario—Alternative Financing and Procurement; University Undergraduate Teaching Quality; Cancer Screening Programs; and the Smart Metering Initiative); the March 22, 2016, report on Education of Aboriginal Students; and the April 5, 2016, report on the Public Accounts of the Province. In each of these sections, you will find:

- the recommendations contained in the Committee's report;
- the auditee's responses to the Committee's recommendations; and
- a table summarizing the status of each action from the Committee's recommendations (e.g., fully implemented, in the process of being implemented, etc.).

In addition, Volume 2 of our Annual Report includes our follow-up on the Ornge Air Ambulance and Related Services Summary Report, tabled by the Committee on October 30, 2014.

Canadian Council of Public Accounts Committees

The Canadian Council of Public Accounts Committees (CCPAC) consists of delegates from federal, provincial and territorial public accounts committees from across Canada. CCPAC holds a joint annual conference with the Canadian Council of Legislative Auditors to discuss issues of mutual interest.

The 37th annual conference was hosted in Yellowknife, Northwest Territories, from August 21 to 23, 2016.

Chapter 7

Office of the Auditor General of Ontario

The Office of the Auditor General of Ontario (Office) serves the Legislative Assembly and the citizens of Ontario by conducting value-for-money, financial, information technology, governance and special audits, reviews and investigations, and reporting on them. In so doing, the Office helps the Legislative Assembly hold the government, its administrators and grant recipients accountable for how prudently they spend public funds, and for the value they obtain for the money spent on behalf of Ontario taxpayers.

The work of the Office is performed under the authority of the *Auditor General Act*. In addition, under the amended *Government Advertising Act, 2004*, the Auditor General is responsible for reviewing and approving certain types of proposed government advertising for compliance with the amended *Government Advertising Act* (see **Chapter 5** for more details on the Office's advertising-review function). Also, in a year that a regularly scheduled election is held, the Auditor General is required under the *Fiscal Transparency and Accountability Act, 2004* to review and deliver an opinion on the reasonableness of the government's pre-election report on its expectations for the financial performance of the province over the next three fiscal years.

All three acts can be found at **www.e-laws.gov.on.ca**.

General Overview

Value-for-money Audits

More than two-thirds of the Office's work relates to value-for-money auditing, which assesses how well a given "auditee" (the entity that we audit) manages and administers its programs or activities. Value-for-money audits delve into the auditee's underlying operations to assess the level of service being delivered to the public and the relative cost-effectiveness of the service. The Office has the authority to conduct value-for-money audits of the following entities:

- Ontario government ministries;
- Crown agencies;
- Crown-controlled corporations; and
- organizations in the broader public sector that receive government grants (for example, agencies that provide mental-health services, children's aid societies, community colleges, hospitals, long-term-care homes, school boards and universities).

The *Auditor General Act* (Act) [in subclauses 12(2)(f)(iv) and (v)] identifies the criteria to be considered in a value-for-money audit:

- Money should be spent with due regard for economy.
- Money should be spent with due regard for efficiency.

- Appropriate procedures should be in place to measure and report on the effectiveness of programs.

The Act requires that the Auditor General report on any instances he or she may have observed where these three value-for-money criteria have not been met. More specific criteria that relate directly to the operations of the particular ministry, program or organization being audited are also developed for each value-for-money audit.

The Act also requires that the Auditor General report on instances where the following was observed:

- Accounts were not properly kept or public money was not fully accounted for.
- Essential records were not maintained or the rules and procedures applied were not sufficient to:
  - safeguard and control public property;
  - effectively check the assessment, collection and proper allocation of revenue; or
  - ensure that expenditures were made only as authorized.
- Money was expended for purposes other than the ones for which it was appropriated.

Assessing the extent to which the auditee complies with the requirement to protect against these risks is generally incorporated into both value-for-money audits and "attest" audits (discussed in a later section). Other compliance work that is also typically included in value-for-money audits includes determining whether the auditee adheres to key provisions in legislation and the authorities that govern the auditee or the auditee's programs and activities.

Government programs and activities are the result of government policy decisions. Thus, our value-for-money audits focus on how well management is administering and executing government policy decisions. It is important to note, however, that in doing so we do not comment on the merits of government policy. Rather, it is the Legislative Assembly that holds the government accountable for policy matters by continually monitoring and challenging government policies through questions during legislative sessions and through reviews of legislation and expenditure estimates.

In planning, performing and reporting on our value-for-money work, we follow the relevant professional standards established by the Chartered Professional Accountants of Canada. These standards require that we have processes for ensuring the quality, integrity and value of our work. Some of the processes we use are described in the following sections.

Selecting What to Audit

The Office audits significant ministry programs and activities, organizations in the broader public sector, and Crown-controlled corporations. Audits are selected using a risk-based approach. Since our mandate expanded in 2004 to allow us to examine organizations in the broader public sector, our audits have covered a wide range of topics in sectors such as health (hospitals, long-term-care homes, Community Care Access Centres, and mental-health service providers), education (school boards, universities and colleges), and social services (children's aid societies and social-service agencies), as well as several large Crown-controlled corporations.

In selecting what program, activity or organization to audit each year, we consider how great the risk is that an auditee is not meeting the three value-for-money criteria, which results in potential negative consequences for the public it serves. The factors we consider include the following:

- the impact of the program, activity or organization on the public;
- the total revenues or expenditures involved;
- the complexity and diversity of the auditee's operations;
- the results of previous audits and related follow-ups;
- recent significant changes in the auditee's operations;
- the benefits of conducting the audit compared to the costs;

- the significance of the potential issues an audit might identify; and
- whether the benefits of conducting the audit justify its costs.

We also consider work that has been done by the auditee's internal auditors, and may rely on, or reference, that work in the conduct of our audit. Depending on what that work consists of, we may defer an audit or change our audit's scope to avoid duplication of effort. In cases where we do not reduce the scope of our audit, we still use and reference the results of internal audit work in our audit report.

Setting Audit Objectives, Audit Criteria and Assurance Levels

When we begin an audit, we set an objective for what the audit is to achieve. We then develop suitable audit criteria to evaluate the design and operating effectiveness of key systems, policies and procedures to address identified risks. Developing criteria involves extensive research on work done by recognized bodies of expertise; other organizations or jurisdictions delivering similar programs and services; management's own policies and procedures; applicable criteria applied in other audits; and applicable laws, regulations and other authorities.

To further ensure their suitability, the criteria we develop are discussed with the auditee's senior management at the planning stage of the audit.

The next step is to design and conduct tests so that we can reach a conclusion regarding our audit objective, and make relevant and meaningful observations and recommendations. Each audit report has a section titled "Audit Objective and Scope," in which the audit objective is stated and the scope of our work is explained. As required under our Act, we also report on circumstances where information was either difficult to obtain or not available for our review.

We plan our work to be able to obtain and provide assurance at an "audit level"—the highest reasonable level of assurance that we can obtain. Specifically, an audit level of assurance is obtained by interviewing management and analyzing information that management provides; examining and testing systems, procedures and transactions; confirming facts with independent sources; and, where necessary because we are examining a highly technical area, obtaining independent expert assistance and advice. We also use professional judgment in much of our work.

Standard audit procedures are designed to provide "a reasonable level of assurance" (rather than an "absolute level") that the audit will identify significant matters and material deviations. Certain factors make it difficult for audit tests to identify all deviations. For example, we may conclude that the auditee had a control system in place for a process or procedure that was working effectively to prevent a particular problem from occurring, but that auditee management or staff might be able to circumvent such control systems, so we cannot guarantee that the problem will never arise.

With respect to the information that management provides, under the Act we are entitled to access all relevant information and records necessary to perform our duties.

The Office can access virtually all information contained in Cabinet submissions or decisions that we deem necessary to fulfill our responsibilities under the Act. However, out of respect for the principle of Cabinet privilege, we do not seek access to the deliberations of Cabinet.

Infrequently, the Office will perform a review rather than an audit. A review provides a moderate level of assurance, obtained primarily through inquiries and discussions with management; analyses of information provided by management; and only limited examination and testing of systems, procedures and transactions. We perform reviews when:

- it would be prohibitively expensive or unnecessary to provide a higher level of assurance; or

- other factors relating to the nature of the program or activity make it more appropriate to conduct a review instead of an audit.

Communicating with Management

To help ensure the factual accuracy of our observations and conclusions, staff from our Office communicate with the auditee's senior management throughout the value-for-money audit or review. Early in the process, our staff meet with management to discuss the objective, criteria and focus of our work in general terms. During the audit or review, our staff meet with management to update them on our progress and ensure open lines of communication. At the conclusion of on-site work, management is briefed on our preliminary results. A conditional draft report is then prepared and provided to and discussed with the auditee's senior management, who provide written responses to our recommendations. These are discussed and incorporated into the draft report, which the Auditor General finalizes with the deputy minister or head of the agency, corporation or grant-recipient organization, after which the report is published in **Chapter 3** of the Auditor General's Annual Report. Effective with the audits conducted during 2015/16, and in compliance with new CPA Canada Standards, letters of representation are signed by senior management confirming that they have provided and disclosed to our Office all relevant information pertaining to the subject audit.

Special Reports

As required by the Act, the Office reports on its audits in an Annual Report to the Legislative Assembly. In addition, the Office may make a special report to the Legislature at any time, on any matter that, in the opinion of the Auditor General, should not be deferred until the Annual Report.

Two sections of the Act authorize the Auditor General to undertake additional special work. Under section 16, the Standing Committee on Public Accounts may resolve that the Auditor General must examine and report on any matter respecting the Public Accounts. Under section 17, the Legislative Assembly, the Standing Committee on Public Accounts or a minister of the Crown may request that the Auditor General undertake a special assignment. However, these special assignments are not to take precedence over the Auditor General's other duties, and the Auditor General can decline such an assignment requested by a minister if he or she believes that it conflicts with other duties.

In recent years when we have received a special request under section 16 or 17, our normal practice has been to obtain the requester's agreement that the special report will be tabled in the Legislature on completion and made public at that time. This year, the following special reports requested under section 17 by the Standing Committee on Public Accounts were tabled:

- an audit on Government Payments to Education-Sector Unions (tabled in May 2016); and
- an audit of the 2015 Pan Am/Parapan Am Games (tabled in June 2016).

As well, we received a request under section 17 from the Minister of Finance to audit the Schedule of Costs Associated with the Ontario Retirement Pension Plan. We completed this work in September 2016 and the results are presented in **Chapter 2** of this Annual Report.

Attest Audits

Attest audits are examinations of an auditee's financial statements. In such audits, the auditor expresses his or her opinion on whether the financial statements present information on the auditee's operations and financial position in a way that is fair and that complies with certain accounting policies (in most cases, with Canadian generally accepted accounting principles). Compliance audit work is also often incorporated into attest-audit work. Specifically, we assess the controls for managing risks relating to improperly kept accounts; unaccounted-for public money; lack of

record-keeping; inadequate safeguarding of public property; deficient procedures for assessing, collecting and properly allocating revenue; unauthorized expenditures; and not spending money on what it was intended for.

The Auditees

Every year, we audit the financial statements of the province and the accounts of many agencies of the Crown. Specifically, the Act [in subsections 9(1), (2), and (3)] requires that:

- the Auditor General audit the accounts and records of the receipt and disbursement of public money forming part of the province's Consolidated Revenue Fund, whether held in trust or otherwise;
- the Auditor General audit the financial statements of those agencies of the Crown that are not audited by another auditor;
- public accounting firms appointed as auditors of certain agencies of the Crown perform their audits under the direction of the Auditor General and report their results to the Auditor General; and
- public accounting firms auditing Crown-controlled corporations deliver to the Auditor General a copy of the audited financial statements of the corporation and a copy of the accounting firm's report of its findings and recommendations to management (typically contained in a management letter).

Chapter 2 discusses this year's attest audit of the province's consolidated financial statements.

We do not typically discuss the results of attest audits of agencies and Crown-controlled corporations in this report unless a significant issue arises and it would be appropriate for all Members of the Legislature to be aware of this issue. Agency legislation normally stipulates that the Auditor General's reporting responsibilities are to the agency's board and the minister(s) responsible for the agency. Our Office also provides copies of our independent auditor's reports and of the related agency financial statements to the deputy minister of the associated ministry, as well as to the Secretary of the Treasury Board.

We identify areas for improvement during the course of an attest audit of an agency and provide our recommendations to agency senior management in a draft report. We then discuss our recommendations with management and revise the report to reflect the results of our discussions. After the draft report is cleared and the agency's senior management has responded to it in writing, we prepare a final report, which is discussed with the agency's audit committee (if one exists). We bring significant matters to the attention of the Legislature by including them in our Annual Report.

Part 1 of **Exhibit 1** lists the agencies that were audited during the 2015/16 audit year. The Office contracts with public accounting firms to serve as our agents in auditing a number of these agencies. Part 2 of **Exhibit 1** and **Exhibit 2** list the agencies of the Crown and the Crown-controlled corporations, respectively, that were audited by public accounting firms during the 2015/16 audit year. **Exhibit 3** lists significant organizations in the broader public sector whose accounts are also audited by public accounting firms and included in the province's consolidated financial statements.

Other Stipulations of the *Auditor General Act*

The *Auditor General Act* came about with the passage on November 22, 2004, of the *Audit Statute Law Amendment Act* (Amendment Act), which received Royal Assent on November 30, 2004. The purpose of the Amendment Act was to make certain changes to the Audit Act to enhance our ability to serve the Legislative Assembly. The most significant of these changes was the expansion of our Office's value-for-money audit mandate to organizations in the broader public sector that receive government grants.

In 2015, the *Building Ontario Up Act* (Budget Measures) received royal assent and, as per

amendment to our Act [Section 13(1)], the government removed our ability to conduct value-for-money audits of Hydro One. However, as per sections 13(2) and 13(3), Hydro One must still provide us with information we need relevant to our audit of the Public Accounts of Ontario. Section 13(14) states that Hydro One can limit providing us with information until it is publicly disclosed.

Appointment of Auditor General

Under the *Auditor General Act* (Act), the Auditor General is appointed as an officer of the Legislative Assembly by the Lieutenant Governor in Council—that is, the Lieutenant Governor appoints the Auditor General on the advice of the Executive Council (the Cabinet). The appointment is made "on the address of the Assembly," meaning that the appointee must be approved by the Legislative Assembly. The Act also requires that the Chair of the Standing Committee on Public Accounts—who, under the Standing Orders of the Legislative Assembly, is a member of the official opposition—be consulted before the appointment is made (for more information about the Standing Committee on Public Accounts, see **Chapter 6**).

Independence

The Auditor General and staff of the Office are independent of the government and its administration. This independence is an essential safeguard that enables the Office to fulfill its auditing and reporting responsibilities objectively and fairly.

The Auditor General is appointed to a 10-year, non-renewable term, and can be dismissed only for cause by the Legislative Assembly. Consequently, the Auditor General maintains an arm's-length distance from the government and the political parties in the Legislative Assembly and is thus free to fulfill the Office's legislated mandate without political pressure.

The Board of Internal Economy, an all-party legislative committee that is independent of the government's administrative process, reviews and approves the Office's budget, which is subsequently laid before the Legislative Assembly. As required by the Act, the Office's expenditures relating to the 2015/16 fiscal year have been audited by a firm of chartered professional accountants, and the audited financial statements of the Office have been submitted to the Board and subsequently must be tabled in the Legislative Assembly. The audited statements and related discussion of expenditures for the year are presented at the end of this chapter.

Confidentiality of Working Papers

In the course of our reporting activities, we prepare draft audit reports and findings reports that are considered an integral part of our audit working papers. Under section 19 of the Act, these working papers do not have to be laid before the Legislative Assembly or any of its committees. As well, our Office is exempt from the *Freedom of Information and Protection of Privacy Act* (FIPPA). This means that our draft reports and audit working papers, including all information obtained from an auditee during the course of an audit, are privileged, and cannot be accessed by anyone under FIPPA, thus further ensuring confidentiality.

Code of Professional Conduct

The Office has a Code of Professional Conduct to ensure that staff maintain high professional standards and keep up a professional work environment. The Code is intended to be a general statement of philosophy, principles and rules regarding conduct for employees of the Office. Our employees have a duty to conduct themselves in a professional manner, and to strive to achieve in their work the highest standards of behaviour, competence and integrity.

The Code explains why these expectations exist, and further describes the Office's responsibilities to the Legislative Assembly, the public and our auditees. The Code also provides guidance on disclosure

requirements and the steps to be taken to avoid conflicts of interest. All employees are required to complete an annual conflict-of-interest declaration and undergo a police security check upon being hired and every five years thereafter.

Office Organization and Personnel

The Office is organized into portfolio teams to align with related audit entities and to foster expertise in the various areas of audit activity. The portfolios, somewhat based on the government's own ministry organization, are each headed by a Director, who oversees and is responsible for the audits within the assigned portfolio. Directors report to Assistant Auditors General, who report to the Auditor General. Reporting to the Directors and rounding out the teams are Audit Managers and various other audit staff, as illustrated in **Figure 1**.

The Auditor General and the Assistant Auditors General make up the Office's Executive Committee. The Auditor General, the Assistant Auditors General, the Audit Directors, the Director of Human Resources, and the Manager of Communications and Government Advertising make up the Office's Senior Management Committee.

Canadian Council of Legislative Auditors

This year, the Northwest Territories hosted the 44th annual meeting of the Canadian Council of Legislative Auditors (CCOLA) in Yellowknife from August 21 to 23, 2016. This annual conference is held jointly with the annual meeting of the Canadian Council of Public Accounts Committees (CCPAC). It brings together legislative auditors and members of the Standing Committees on Public Accounts from the federal government, provinces and territories, and provides an excellent opportunity for sharing ideas, exchanging information and learning about best practices for Standing Committees on Public Accounts in Canada.

International Visitors

As an acknowledged leader in value-for-money auditing, the Office frequently receives requests to meet with visitors and delegations from abroad to discuss the roles and responsibilities of our Office, and to share our value-for-money and other audit experiences. During the period from October 1, 2015, to September 30, 2016, our Office hosted delegations from various parts of China, South Africa and Fiji, as well as visitors from Cameroon, Ghana, Tanzania and Vietnam. During this period, our Office also signed Memoranda of Understanding with the audit office in Dubai, United Arab Emirates, and Etihad Airways' internal audit group for the sharing of information and staff exchange opportunities.

Results Produced by the Office This Year

This was another productive year for the Office. In total, while operating within our budget, we completed 13 value-for-money audits, 12 follow-ups on previous value-for-money reports, three follow-ups on previous Special Reports, eight follow-ups on reports issued by the Standing Committee on Public Accounts, and four reports in the Toward Better Accountability section of our Annual Report on the Accounting Treatment of Pension Funds, the Provincial Appointment Process, Information Technology controls, and the Nursing Retention Fund.

We also established two new audit teams—an Information Technology Team that is just starting up and produced the IT audit report mentioned here and assisted on many VFM and attest audits;

Figure 1: Office Organization, September 30, 2016

Auditor General

Bonnie Lysyk

Assistant Auditors General

Gus Chagani
Rudolph Chiu
Susan Klein
Nick Stavropoulos

Communications and Government Advertising Review

Christine Pedias, Manager
Mariana Green
Shirley McGibbon
Tiina Randoja
Ellen White

Standards and Research

Rebecca Yosipovich, Manager

Audit Learning Network

Jing Wang, Manager

Operations

Human Resources and Finance
Cindy MacDonald, Director, Human Resources
Li-Lian Koh, Manager, Finance

Payroll and Administration
Syed Zain Ali
Vanessa Dupuis
Sohani Myers
Louise Pellerin
Shanta Persaud
Christine Wu

Information Technology
Shams Ali
Peter Lee

Financial Statement Audit Portfolios and Staff*

Crown Agencies (1)

Teresa Carello, Director
Jeremy Blair, Manager
David Catarino
Neil Ganatra
Mary Martino
Roger Munroe
Cynthia Tso

Crown Agencies (2)

Laura Bell, Director
Kim Cho, Director
Constantino De Sousa, Manager
Izabela Beben
Tom Chatzidimos
Kandy Fletcher
Adam Reuben
Zachary Thomas

Public Accounts

Bill Pelow, Director
Audelyn Budihardjo, Manager
Georgegiana Tanudjaja, Manager
Marcia DeSouza
Taylor Lew

Value-for-money Audit Portfolios and Staff*

Education

Vanna Gotsis, Director
Tino Bove, Manager
Rashmeet Gill, Manager
Fatima Ahmed
Kevin Aro
Sally Chang
Jennifer Lee
Kundai Marume
Mamta Patel
Ellen Tepelenas
Jeremy Walton

Health

Sandy Chan, Director
Denise Young, Manager
Krista Bennatti-Roberts
Lisa Nguyen
Mafu Ojisua
Gurinder Parmar
Claire Whalen

Health and Energy

Vivan Sin, Director
Gigi Yip, Director
Ariane Chan, Manager
Alice Nowak, Manager
Arujunan Balakrishnan
Nixon Liu
Mohak Malik
Julia Man
Pasha Sidhu
Adam Vanderheyden
Alla Volodina

Infrastructure, Environment and Economic Development

Naomi Herberg, Director
Katrina Exaltacion, Manager
Alexander Truong, Manager
Anne Benaroya
Anita Cheung
Dimitar Dimitrov
Jesse Dufour
Thomas Fitzmaurice
Muddassir Mahmood
Kristy May

Justice and Regulatory

Bartosz Amerski, Director
Fraser Rogers, Manager
Michael Yarmolinsky, Manager
Helena Cheung
Ash Goel
Emilia Krzyminski
Benjamin Leung
Wendy Ng
Oscar Rodriguez
Ratmono Thejo
Brian Wanchuk
Robyn Wilson

Social Services, Tax Revenue and Information Technology (IT)

Osman Qazi, Director (IT)
Shariq Saeed, Manager (IT)
Shreya Shah, Manager
Emanuel Tsikritsis, Manager
Koreena Bordenca
Navreen Chohan
Christopher Duhamel
Evan Gravenor
Arie Lozinsky
Shuaib Mohammed (IT)
Zahid Muradzada
Subran Premachandran
Dora Ulisse

Recommendations, Follow-ups and Cross-Ministry

Wendy Cumbo, Director
Ali Hamza

* Staff below manager level shift between portfolios to address seasonal financial statement audit workload pressures.

Note: The following people contributed to this Annual Report but retired or left before September 30, 2016: Mona Ali, Walter Allan, Paul Amodeo, Loretta Cheung, Mary Chu, Lauren Hanna, Veronica Ho, Karen Liew, Vince Mazzone, John McDowell, Aaqib Shah, Mohammed Siddiqui, Megan Sim, Zhenya Stekovic, Janet Wan, Tiffany Yau and Celia Yeung.

and an Audit Recommendation Follow-up Team that put in place systems for ongoing follow-ups on our audit recommendations and those of the Standing Committee on Public Accounts. We also issued two Special Reports: Government Payments to Education Sector Unions (May 2016) and 2015 Pan Am/Parapan Am Games (June 2016). As well, we completed and issued an audit of the Schedule of Costs Associated with the Ontario Retirement Pension Plan.

As mentioned in the Attest Audits section earlier, we are responsible for auditing the province's consolidated financial statements (further discussed in **Chapter 2**), as well as the statements of more than 40 Crown agencies. There were delays in finalizing the consolidated financial statements this year due to an accounting issue related to pensions. Otherwise, we met all of our key financial statement audit deadlines while continuing to invest in training to ensure adherence to accounting and assurance standards and methodology for conducting attest audits.

We successfully met our review responsibilities under the *Government Advertising Act, 2004*, as further discussed in **Chapter 5**.

The results produced by the Office this year would not have been possible without the hard work and dedication of our staff, as well as that of our agent auditors, contract staff and expert advisers.

Financial Accountability

The following discussion and our financial statements present the Office's financial results for the fiscal year 2015/16. Our financial statements have been prepared in accordance with Canadian public-sector accounting standards. In accordance with these standards, we have presented a breakdown of our expenses by the main activities our Office is responsible for: value-for-money and special audits, financial-statement audits, and the review of government advertising. This breakdown is provided in Note 9 to the financial statements and indicates that 67% of our time was used to perform value-for-money and special audits, a stated priority of the Standing Committee on Public Accounts, and 32% to completing the audits of the annual financial statements of the province and over 40 of its agencies. The remaining time was devoted to our statutory responsibilities under the *Government Advertising Act*.

Figure 2 provides a comparison of our approved budget and expenditures over the last five years. **Figure 3** presents the major components of our spending during the 2015/16 fiscal year, and shows that salary and benefit costs for staff accounted for 69%, which was close to the same proportion as in 2014/15, while professional and other services,

Figure 2: Five-year Comparison of Spending (Accrual Basis) ($ 000)
Prepared by the Office of the Auditor General of Ontario

	2011/12	2012/13	2013/14	2014/15	2015/16
Approved budget	**16,224**	**16,224**	**16,427**	**16,520**	**18,083**
Actual expenses					
Salaries and benefits	11,039	11,390	11,342	11,201	11,504
Professional and other services	1,667	1,643	1,759	2,284	2,195
Rent	1,016	989	1,001	1,008	1,059
Travel and communications	303	309	276	336	354
Training, supplies and equipment	1,216	1,015	1,213	1,373	1,488
Total	**15,241**	**15,346**	**15,591**	**16,202**	**16,600**
Unused appropriations*	**997**	**1,000**	**679**	**160**	**974**

* These amounts are typically slightly different than the excess of appropriation over expenses as a result of non-cash expenses (such as amortization of capital assets, deferred lease inducements and employee future benefit accruals).

Figure 3: Spending by Major Expenditure Category, 2015/16

Prepared by the Office of the Auditor General of Ontario

Professional and other services (13%)
Rent (7%)
Travel and communication (2%)
Training, supplies and equipment (9%)
Salaries and benefits (69%)

Figure 4: Actual Expenses for 2015/16 and 2014/15

Prepared by the Office of the Auditor General of Ontario

Actual Expenses	2015/16	2014/15	% Change
Salaries and benefits	11,504	11,201	3
Professional and other services	2,195	2,284	-4
Rent	1,059	1,008	5
Travel and communications	354	336	5
Training, supplies and equipment	1,488	1,373	8
Total	**16,600**	**16,202**	**2**

along with rent, constituted most of the remainder. These proportions have been relatively stable in recent years. **Figure 4** presents the year-over-year percentage change of actual expenditures. Overall, our expenses increased by 2% in 2015/16 from the previous year.

Our salaries budget was frozen for five years, from 2010/11 to 2014/15. As a result, we were unable to fully staff up to our approved complement, and we faced challenges in hiring and retaining qualified professional staff in the competitive Toronto job market—our public-service salary ranges have not kept pace with compensation increases for such professionals in the private sector. In July 2015, the Board of Internal Economy of the Legislature approved our request for salary and benefits funding for the 2015/16 fiscal year to be able to fill our vacant positions and bring our staffing to our Board of Internal Economy-approved complement of 116. We experienced timing challenges in filling these positions in 2015/16 and returned unspent funding. However, as of March 31, 2017, we will be close to our approved staffing complement.

A more detailed discussion of the changes in our expenses and some of the challenges we face follows:

Salaries and Benefits

Our salary and benefit costs in 2015/16 were 3% higher than in the previous year, mainly as a result of implementing changes to staff compensation. Cabinet Office, in a letter dated December 15, 2015, provided increases to those working in the provincial ministries. We then applied similar increases in our Office (but below the approved increase cap of the Board of Internal Economy of 3.5%.)

In 2015/16, our average staffing level increased by two, to 100 people from 98 in the previous year, as shown in **Figure 5**. Most students who earned their professional accounting designation during the year remained with us. Salaries for qualified accountants rise fairly quickly in the private sector in the first five years following qualification, so we also increase our salaries to our newly qualified staff in order to remain competitive.

Staff departures were experienced as the market for professional accountants has remained fairly robust and a number of long-term staff retired. Our hiring continues to be primarily at levels where our salaries and benefits are competitive. Our salaries fall behind private- and broader-public-sector salary scales for more experienced professional accountants. The growing complexity of our audits requires highly qualified, experienced staff.

Figure 5: Staffing, 2011/12–2015/16

Prepared by the Office of the Auditor General of Ontario

Professional and Other Services

These services include both contract professionals, including contract CPA firms, and contract specialists assisting in our value-for-money audits, and represent about 13% of total expenditures. These costs decreased by 4% compared to the previous year. Given the more complex work and peak period deadlines for finalizing the financial statement audits of Crown agencies and the province, we continue to rely on contract professionals to assist is in meeting our legislated responsibilities. As such, we prudently engage contract staff when necessary to cover for special assignments, parental or unexpected leaves, as well as to help us manage peak workloads during the late spring and summer months.

For 2015/16, our costs relating to legal services, building services and staff membership dues decreased.

Contract costs for the CPA firms with which we work remain high because of the higher salaries they pay their staff. We continue to competitively test the market for such services as contracts expire.

Rent

Our costs for accommodation rose by 5% compared to the previous year, due primarily to an increase in utility costs billed under our ten-year lease.

Travel and Communications

Our travel and communications costs rose 5%. Selected audits performed during 2015/16 resulted in increased travel expenses such as flights, accommodations, car rentals and meals.

Training, Supplies and Equipment

This category includes asset amortization, supplies and equipment maintenance, office improvements, training and statutory expenses. These expenses were 8% higher than the year before, primarily due to an increase in auditor training and development audit hardware, software and equipment requirements.

Financial Statements

MANAGEMENT'S RESPONSIBILITY FOR FINANCIAL STATEMENTS

The accompanying financial statements of the Office of the Auditor General of Ontario are the responsibility of management of the Office. Management has prepared the financial statements to comply with the *Auditor General Act* and with Canadian public sector accounting principles.

Management maintains a system of internal controls that provides reasonable assurance that transactions are appropriately authorized, assets are adequately safeguarded, appropriations are not exceeded, and the financial information contained in these financial statements is reliable and accurate.

The financial statements have been audited by the firm of Adams & Miles LLP, Chartered Professional Accountants. Their report to the Board of Internal Economy, stating the scope of their examination and opinion on the financial statements, appears on the following page.

Bonnie Lysyk, CPA, CA, LPA
Auditor General
August 10, 2016

Mohammed Siddiqui, CPA, CA
Chief Operating Officer
August 10, 2016

Adams & Miles LLP
Chartered Professional Accountants

INDEPENDENT AUDITOR'S REPORT

To the Board of Internal Economy of
Legislative Assembly of Ontario

We have audited the accompanying financial statements of the Office of the Auditor General of Ontario, which comprise the statement of financial position as at March 31, 2016 and the statements of operations and accumulated deficit, changes in net financial debt and cash flows for the year then ended, and a summary of significant accounting policies and other explanatory information.

Management's Responsibility for the Financial Statements
Management is responsible for the preparation and fair presentation of these financial statements in accordance with Canadian public sector accounting standards, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility
Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with Canadian generally accepted auditing standards. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on our judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, we consider internal control relevant to the preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Office of the Auditor General of Ontario's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion
In our opinion, the financial statements present fairly, in all material respects, the financial position of the Office of the Auditor General of Ontario as at March 31, 2016 and the results of its operations and its cash flows for the year then ended in accordance with Canadian public sector accounting standards.

Adams & Miles LLP

Chartered Professional Accountants
Licensed Public Accountants

Toronto, Canada
August 10, 2016

Office of the Auditor General of Ontario

Statement of Financial Position
As at March 31, 2016

	2016 $	2015 $
Financial assets		
Cash	620,623	344,227
Harmonized sales taxes recoverable	178,876	140,811
Due from Consolidated Revenue Fund	289,597	370,758
	1,089,096	855,796
Financial liabilities		
Accounts payable and accrued liabilities (Note 4)	1,862,900	1,792,269
Accrued employee benefits obligation [Note 5(B)]	2,107,000	2,477,000
Deferred lease inducement (Note 10)	179,909	212,131
	4,149,809	4,481,400
Net financial debt	(3,060,713)	(3,625,604)
Non-financial assets		
Tangible capital assets (Note 3)	1,202,221	1,257,594
Accumulated deficit	(1,858,492)	(2,368,010)

Commitments (Note 6)
Measurement uncertainty [Note 2(F)]

See accompanying notes to financial statements.

Approved by the Office of the Auditor General of Ontario:

Bonnie Lysyk, CPA, CA, LPA
Auditor General

Mohammed Siddiqui, CPA, CA
Chief Operating Officer

Office of the Auditor General of Ontario

Statement of Operations and Accumulated Deficit
For the Year Ended March 31, 2016

	2016 Budget (Note 12) $	2016 Actual $	2015 Actual $
Expenses			
Salaries and wages	10,706,300	9,574,443	9,244,095
Employee benefits (Note 5)	2,855,100	1,929,601	1,956,804
Professional and other services	1,888,500	2,195,380	2,283,806
Office rent	1,088,000	1,058,562	1,007,630
Amortization of capital assets	—	381,490	359,346
Travel and communication	463,600	354,235	336,663
Training and development	217,900	202,986	123,516
Supplies and equipment	357,500	381,474	223,679
Transfer payment: CCAF-FCVI Inc.	73,000	72,506	68,108
Statutory expenses: *Auditor General Act*	246,000	280,137	245,128
Government Advertising Act	15,000	8,150	6,368
Statutory services	171,700	160,586	346,862
Total expenses (Notes 8 and 9)	18,082,600	16,599,550	16,202,005
Revenue			
Consolidated Revenue Fund – Voted appropriations [Note 2(B)]	18,082,600	18,082,600	16,520,400
Excess of revenue over expenses		1,483,050	318,395
Less: returned to the Province [Note 2(B)]		973,532	159,815
Net operations surplus		509,518	158,580
Accumulated deficit, beginning of year		(2,368,010)	(2,526,590)
Accumulated deficit, end of year		(1,858,492)	(2,368,010)

See accompanying notes to financial statements.

Office of the Auditor General of Ontario

Statement of Changes in Net Financial Debt
For the Year Ended March 31, 2016

	2016 $	2015 $
Net operations surplus	509,518	156,580
Purchase of tangible capital assets	(326,117)	(779,150)
Amortization of tangible capital assets	381,490	359,346
Increase (decrease) in net financial debt	564,891	(261,224)
Net financial debt, beginning of year	(3,625,604)	(3,364,380)
Net financial debt, end of year	(3,060,713)	(3,625,604)

See accompanying notes to financial statements.

Office of the Auditor General of Ontario

Statement of Cash Flows
For the Year Ended March 31, 2016

	2016 $	2015 $
Operating transactions		
Net operations surplus	509,518	158,580
Amortization of tangible capital assets	381,490	359,346
Amortization of deferred lease inducement	(32,222)	(32,223)
Accrued employee benefits expense	(569,000)	(61,000)
	289,786	424,703
Changes in non-cash working capital		
Decrease (increase) in harmonized sales taxes recoverable	(38,065)	5,798
Decrease in due from Consolidated Revenue Fund	81,161	109,068
Decrease in lease inducement receivable	-	322,225
Increase (decrease) in accounts payable and accrued salaries and benefits (Note 4)	269,631	(154,754)
	312,727	282,337
Cash provided by operating transactions	602,513	707,040
Capital transactions		
Purchase of tangible capital assets	(326,117)	(779,150)
Increase (decrease) in cash	276,396	(72,110)
Cash, beginning of year	344,227	416,337
Cash, end of year	620,623	344,227

See accompanying notes to financial statements.

Office of the Auditor General of Ontario

Notes to Financial Statements
For the Year Ended March 31, 2016

1. Nature of Operations

In accordance with the provisions of the *Auditor General Act* and various other statutes and authorities, the Auditor General, through the Office of the Auditor General of Ontario (the Office), conducts independent audits of government programs, of institutions in the broader public sector that receive government grants, and of the fairness of the financial statements of the Province and numerous agencies of the Crown. In doing so, the Office promotes accountability and value-for-money in government operations and in broader public sector organizations.

Additionally, under the *Government Advertising Act, 2004*, the Office is required to review specified types of advertising, printed matter or reviewable messages proposed by government offices to determine whether they meet the standards required by the Act.

Under both Acts, the Auditor General reports directly to the Legislative Assembly.

As required by the *Fiscal Transparency and Accountability Act, 2004*, in an election year the Office is also required to report on the reasonableness of a Pre-Election Report prepared by the Ministry of Finance.

2. Summary of Significant Accounting Policies

The financial statements have been prepared in accordance with Canadian public sector accounting standards. The significant accounting policies are as follows:

(A) ACCRUAL BASIS

These financial statements are accounted for on an accrual basis whereby expenses are recognized in the fiscal year that the events giving rise to the expense occur and resources are consumed.

(B) VOTED APPROPRIATIONS

The Office is funded through annual voted appropriations from the Province of Ontario. Unspent appropriations are returned to the Province's Consolidated Revenue Fund each year. As the voted appropriation is prepared on a modified cash basis, an excess or deficiency of revenue over expenses arises from the application of accrual accounting, including the capitalization and amortization of tangible capital assets, the deferral and amortization of the lease inducement and the recognition of employee benefits expenses earned to date but that will be funded from future appropriations.

The voted appropriation for statutory expenses is intended to cover the salary of the Auditor General as well as the costs of any expert advice or assistance required to help the Office meet its responsibilities under the *Government Advertising Act* and the *Fiscal Transparency and Accountability Act*, or to conduct special assignments under Section 17 of the *Auditor General Act*.

Office of the Auditor General of Ontario

Notes to Financial Statements
For the Year Ended March 31, 2016

2. Summary of Significant Accounting Policies (Continued)

(C) TANGIBLE CAPITAL ASSETS

Tangible capital assets are recorded at historical cost less accumulated amortization. Amortization of tangible capital assets is recorded on the straight-line method over the estimated useful lives of the assets as follows:

Computer hardware	3 years
Computer software	3 years
Furniture and fixtures	5 years
Leasehold improvements	The remaining term of the lease

(D) FINANCIAL INSTRUMENTS

The Office's financial assets and financial liabilities are accounted for as follows:

- Cash is subject to an insignificant risk of change in value so carrying value approximates fair value.
- Due from Consolidated Revenue Fund is recorded at cost.
- Accounts payable and accrued liabilities are recorded at cost.
- Accrued employee benefits obligation is recorded at cost based on the entitlements earned by employees up to March 31, 2016. A fair value estimate based on actuarial assumptions about when these benefits will actually be paid has not been made as it is not expected that there would be a significant difference from the recorded amount.

It is management's opinion that the Office is not exposed to any interest rate, currency, liquidity or credit risk arising from its financial instruments due to their nature.

(E) DEFERRED LEASE INDUCEMENT

The deferred lease inducement is being amortized as a reduction of rent expense on a straight-line basis over the 10-year lease period that commenced November 1, 2011.

(F) MEASUREMENT UNCERTAINTY

The preparation of financial statements in accordance with Canadian public sector accounting standards requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities at the date of the financial statements, and the reported amounts of revenue and expenses during the reporting period. Items requiring the use of significant estimates include: useful life of capital assets and accrued employee benefits obligation.

Estimates are based on the best information available at the time of preparation of the financial statements and are reviewed annually to reflect new information as it becomes available. Measurement uncertainty exists in these financial statements. Actual results could differ from these estimates. These estimates and assumptions are reviewed periodically, and adjustments are reported in the Statement of Operations and Accumulated Deficit in the year in which they become known.

Office of the Auditor General of Ontario

Notes to Financial Statements
For the Year Ended March 31, 2016

3. Tangible Capital Assets

	Computer hardware $	Computer software $	Furniture and fixtures $	Leasehold improvements $	2016 Total $
Cost					
Balance, beginning of year	733,039	196,094	237,143	986,863	2,153,139
Additions	232,454	-	93,663	-	326,117
Write-off of fully amortized assets	(243,825)	(49,072)	(51,820)	-	(344,717)
Balance, end of year	721,668	147,022	278,986	986,863	2,134,539
Accumulated amortization					
Balance, beginning of year	500,860	142,112	108,343	144,230	895,545
Amortization	174,224	32,583	45,048	129,635	381,490
Write-off of fully amortized assets	(243,825)	(49,072)	(51,820)	-	(344,717)
Balance, end of year	431,259	125,623	101,571	273,865	932,318
Net Book Value, March 31, 2016	290,409	21,399	177,415	712,998	1,202,221

	Computer hardware $	Computer software $	Furniture and fixtures $	Leasehold improvements $	2015 Total $
Cost					
Balance, beginning of year	711,086	336,676	219,882	437,338	1,704,982
Additions	128,246	39,977	61,402	549,525	779,150
Write-off of fully amortized assets	(106,293)	(180,559)	(44,141)	-	(330,993)
Balance, end of year	733,039	196,094	237,143	986,863	2,153,139
Accumulated amortization					
Balance, beginning of year	424,820	272,149	116,377	53,846	867,192
Amortization	182,333	50,522	36,107	90,384	359,346
Write-off of fully amortized assets	(106,293)	(180,559)	(44,141)	-	(330,993)
Balance, end of year	500,860	142,112	108,343	144,230	895,545
Net Book Value, March 31, 2015	232,179	53,982	128,800	842,632	1,257,594

Office of the Auditor General of Ontario

Notes to Financial Statements
For the Year Ended March 31, 2016

4. Accounts Payable and Accrued Liabilities

	2016 $	2015 $
Accounts payable	528,364	381,328
Accrued salaries and benefits	650,536	527,941
Accrued severance, vacation and other credits	684,000	883,000
	1,862,900	1,792,269

Accounts payable relates largely to normal business transactions with third-party vendors and is subject to standard commercial terms. Accruals for salaries and benefits and severance, vacation and other credits are recorded based on employment arrangements and legislated entitlements.

5. Obligation for Employee Future Benefits

Although the Office's employees are not members of the Ontario Public Service, under provisions in the *Auditor General Act*, the Office's employees are entitled to the same benefits as Ontario Public Service employees. The future liability for benefits earned by the Office's employees is included in the estimated liability for all provincial employees that have earned these benefits and is recognized in the Province's consolidated financial statements. In the Office's financial statements, these benefits are accounted for as follows:

(A) PENSION BENEFITS

The Office's employees participate in the Public Service Pension Fund (PSPF) which is a defined benefit pension plan for employees of the Province and many provincial agencies. The Province of Ontario, which is the sole sponsor of the PSPF, determines the Office's annual payments to the fund. As the sponsor is responsible for ensuring that the pension funds are financially viable, any surpluses or unfunded liabilities arising from statutory actuarial funding valuations are not assets or obligations of the Office. The Office's required annual payment of $745,623 (2015 - $723,315), is included in employee benefits expense in the Statement of Operations and Accumulated Deficit.

(B) ACCRUED EMPLOYEE BENEFITS OBLIGATION

The costs of legislated severance, compensated absences and unused vacation entitlements earned by employees during the year amounted to ($50,000) (2015 – $151,000) and are included in employee benefits in the Statement of Operations and Accumulated Deficit. The total liability for these costs is reflected in the accrued employee benefits obligation, less any amounts payable within one year, which are included in accounts payable and accrued liabilities, as follows:

Office of the Auditor General of Ontario

Notes to Financial Statements
For the Year Ended March 31, 2016

5. Obligation for Future Employee Benefits (Continued)

(B) ACCRUED EMPLOYEE BENEFITS OBLIGATION

	2016 $	2015 $
Total liability for severance and vacation credits	2,791,000	3,360,000
Less: Due within one year and included in accounts payable and accrued liabilities	684,000	883,000
Accrued employee benefits obligation	2,107,000	2,477,000

(C) OTHER NON-PENSION POST-EMPLOYMENT BENEFITS

The cost of other non-pension post-retirement benefits is determined and funded on an ongoing basis by the Ontario Ministry of Government Services and accordingly is not included in these financial statements.

6. Commitments

The Office has an operating lease to rent premises which expires on October 31, 2021. The minimum rental commitment for the remaining term of the lease is as follows:

	$
2016–17	508,800
2017–18	514,200
2018–19	521,700
2019–20	527,100
2020–21	534,600
2021–22	314,400

The Office is also committed to pay its proportionate share of realty taxes and operating expenses for the premises amounting to approximately $565,000 during 2016 (2015 - $519,000).

7. Public Sector Salary Disclosure Act, 1996

Section 3(5) of this Act requires disclosure of the salary and benefits paid to all Ontario public-sector employees earning an annual salary in excess of $100,000. This disclosure for the 2015 calendar year is as follows:

Office of the Auditor General of Ontario

Notes to Financial Statements
For the Year Ended March 31, 2016

7. Public Sector Salary Disclosure Act, 1996 (Continued)

Name	Position	Salary $	Taxable Benefits $
Lysyk, Bonnie	Auditor General	259,344	4,154
Chagani, Gus	Assistant Auditor General	154,291	255
Chiu, Rudolph	Assistant Auditor General	158,522	256
Klein, Susan	Assistant Auditor General	164,178	256
Siddiqui, Mohammed	Chief Operating Officer	145,974	256
Bell, Laura	Director	123,614	218
Carello, Teresa	Director	117,515	191
Chan, Sandy	Director	124,245	202
Cho, Kim	Director	116,986	201
Cumbo, Wendy	Director	115,695	201
Fitzmaurice, Gerard	Director	165,033	158
Gotsis, Vanna	Director	126,738	211
Herberg, Naomi	Director	115,441	192
Mazzone, Vince	Director	139,934	231
McDowell, John	Director	139,934	231
Pelow, William	Director	126,738	211
Stavropoulos, Nick	Director	121,834	202
Yip, Gigi	Director	107,933	186
Allan, Walter	Audit Manager	113,214	187
Bove, Tino	Audit Manager	109,013	182
Rogers, Fraser	Audit Manager	113,214	187
Sin, Vivian	Audit Manager	115,104	191
Tsikritsis, Emanuel	Audit Manager	115,625	187
Yeung, Celia	Audit Manager	103,380	183
Young, Denise	Audit Manager	113,214	187
Muhammad, Shariq	Senior IT Auditor and Teammate Specialist	102,392	177
Pedias, Christine	Manager, Corporate Communications and Government Advertising Review	101,810	180
Yosipovich, Rebecca	Standards and Research Manager	102,132	180
Chatzidimos, Tom	Audit Supervisor	100,721	174
Tepelenas, Ellen	Audit Supervisor	105,661	176
Wanchuk, Brian	Audit Supervisor	103,656	176

Office of the Auditor General of Ontario

Notes to Financial Statements
For the Year Ended March 31, 2016

8. Reconciliation to Public Accounts Volume 1 Basis of Presentation

The Office's Statement of Expenses presented in Volume 1 of the Public Accounts of Ontario was prepared on a basis consistent with the accounting policies followed for the preparation of the Estimates submitted for approval to the Board of Internal Economy, under which purchases of computers and software are expensed in the year of acquisition rather than being capitalized and amortized over their useful lives. Volume 1 also excludes the accrued obligation for employee future benefits and deferred lease inducement recognized in these financial statements. A reconciliation of total expenses reported in Volume 1 to the total expenses reported in these financial statements is as follows:

	2016 $	2015 $
Total expenses per Public Accounts Volume 1	17,145,399	16,392,807
purchase of capital assets	(326,117)	(779,150)
amortization of capital assets	381,490	359,346
receipt of lease inducement	-	322,225
change in accrued future employee benefit costs	(569,000)	(61,000)
amortization of deferred lease inducement	(32,222)	(32,223)
	(545,849)	(190,802)
Total expenses per the Statement of Operations and Accumulated Deficit	16,599,550	16,202,005

Office of the Auditor General of Ontario

Notes to Financial Statements
For the Year Ended March 31, 2016

9. Expenses by Activity

	2016				
	Salaries and Benefits	Other Operating Expenses	Statutory Expenses	Total	%
Value for money and special audits	8,052,831	2,684,447	393,100	11,130,378	67.1
Financial statement audits	3,359,181	1,922,123	33,616	5,314,920	32.0
Government advertising	92,032	40,063	22,157	154,252	0.9
	11,504,044	4,646,633	448,873	16,599,550	100.0
%	69.3	28.0	2.7	100.0	

	2015				
	Salaries and Benefits	Other Operating Expenses	Statutory Expenses	Total	%
Value for money and special audits	8,210,259	2,510,725	550,319	11,271,303	69.5
Financial statement audits	2,878,631	1,864,968	29,415	4,773,014	29.5
Government advertising	112,009	27,055	18,624	157,388	1.0
	11,200,899	4,402,748	598,358	16,202,005	100.0
%	69.1	27.2	3.7	100.0	

Expenses have been allocated to the Office's three main activities based primarily on the hours charged to each activity as recorded by staff in the Office's time accounting system, including administrative time and overhead costs that could not otherwise be identified with a specific activity. Expenses incurred for only one activity, such as most travel costs and professional services, are allocated to that activity based on actual billings.

Office of the Auditor General of Ontario

Notes to Financial Statements
For the Year Ended March 31, 2016

10. Deferred Lease Inducement

As part of the lease arrangements for its office premises, the Office negotiated a lease inducement of $322,225 to be applied to future accommodation costs. This deferred lease inducement is being amortized as a reduction of rent expense on a straight-line basis over the 10-year lease period that commenced November 1, 2011. The Office received payment for the lease inducement in 2015.

11. Unused Appropriations

	2016 $	2015 $
Consolidated Revenue Fund – Voted appropriations [Note 2(B)]	18,082,600	16,520,400
Less: Appropriations received from the Province	17,109,068	16,360,585
Unused Appropriations	973,532	159,815
Funding not requested	733,377	97,628
Cash returned to the Province	207,933	29,964
Adjustment for amortization of deferred lease inducement	32,222	32,223
	973,532	159,815

12. Budgeted Figures

Budgeted figures were approved by the Board of Internal Economy and were prepared on a modified cash basis of accounting for presentation in Volume 1 of the Public Accounts of Ontario. This differs from Public Sector Accounting Standards, as discussed in Note 8.

13. Comparative Figures

Certain comparative figures have been reclassified to conform to the current basis of the financial statement presentation.

Exhibit 1

Agencies of the Crown

1. Agencies whose accounts are audited by the Auditor General

Agricorp
Algonquin Forestry Authority
Cancer Care Ontario
Centennial Centre of Science and Technology
Chief Electoral Officer, *Election Finances Act*
Election Fees and Expenses, *Election Act*
Financial Accountability Office of Ontario
Financial Services Commission of Ontario
Grain Financial Protection Board, Funds for Producers of Grain Corn, Soybeans, Wheat and Canola
Investor Education Fund, Ontario Securities Commission
Legal Aid Ontario
Liquor Control Board of Ontario
Livestock Financial Protection Board, Fund for Livestock Producers
Motor Vehicle Accident Claims Fund
Northern Ontario Heritage Fund Corporation
Office of the Assembly
Office of the Children's Lawyer
Office of the Environmental Commissioner
Office of the French Language Services Commissioner
Office of the Information and Privacy Commissioner
Office of the Ombudsman
Ontario Clean Water Agency (December 31)*
Ontario Educational Communications Authority
Ontario Electricity Financial Corporation
Ontario Energy Board
Ontario Financing Authority
Ontario Food Terminal Board
Ontario Heritage Trust
Ontario Immigrant Investor Corporation
Ontario Media Development Corporation
Ontario Mortgage and Housing Corporation
Ontario Northland Transportation Commission
Ontario Place Corporation (December 31)*
Ontario Racing Commission
Ontario Securities Commission
Pension Benefits Guarantee Fund, Financial Services Commission of Ontario
Province of Ontario Council for the Arts
Provincial Advocate for Children and Youth
Provincial Judges Pension Fund, Provincial Judges Pension Board
Public Guardian and Trustee for the Province of Ontario

2. Agencies whose accounts are audited by another auditor under the direction of the Auditor General

Niagara Parks Commission (October 31)*
St. Lawrence Parks Commission
Workplace Safety and Insurance Board (December 31)*

* Dates in parentheses indicate fiscal periods ending on a date other than March 31.

Exhibit 2

Crown-Controlled Corporations

Corporations whose accounts are audited by an auditor other than the Auditor General, with full access by the Auditor General to audit reports, working papers and other related documents as required

Agricultural Research Institute of Ontario
Board of Funeral Services
Brampton Distribution Holdco Inc. (December 31)*
Central East Local Health Integration Network
Central Local Health Integration Network
Central West Local Health Integration Network
Champlain Local Health Integration Network
Deposit Insurance Corporation of Ontario (December 31)*
Education Quality and Accountability Office
eHealth Ontario
Erie St. Clair Local Health Integration Network
Forest Renewal Trust
Hamilton Niagara Haldimand Brant Local Health Integration Network
HealthForceOntario Marketing and Recruitment Agency
Higher Education Quality Council of Ontario
Human Rights Legal Support Centre
Hydro One Limited (December 31)*
Independent Electricity System Operator (December 31)*
McMichael Canadian Art Collection
Metrolinx
Metropolitan Toronto Convention Centre Corporation
Mississauga Halton Local Health Integration Network
Municipal Property Assessment Corporation (December 31)*
North East Local Health Integration Network
North Simcoe Muskoka Local Health Integration Network
North West Local Health Integration Network
Ontario Capital Growth Corporation
Ontario French-language Educational Communications Authority
Ontario Health Quality Council
Ontario Infrastructure and Lands Corporation
Ontario Lottery and Gaming Corporation
Ontario Pension Board (December 31)*
Ontario Power Authority (December 31)*
Ontario Power Generation Inc. (December 31)*
Ontario Tourism Marketing Partnership Corporation
Ontario Trillium Foundation
Ottawa Convention Centre Corporation
Owen Sound Transportation Company Limited
Public Health Ontario
Royal Ontario Museum
Science North
South East Local Health Integration Network
South West Local Health Integration Network
Toronto Central Local Health Integration Network
Toronto Islands Residential Community Trust Corporation
Toronto Organizing Committee for the 2015 Pan American and Parapan American Games (TO2015)
Toronto Waterfront Revitalization Corporation
Trillium Gift of Life Network
Walkerton Clean Water Centre
Waterloo Wellington Local Health Integration Network

* Dates in parentheses indicate fiscal periods ending on a date other than March 31.

Exhibit 3

Organizations in the Broader Public Sector

Broader-public-sector organizations whose accounts are audited by an auditor other than the Auditor General, with full access by the Auditor General to audit reports, working papers and other related documents as required[1]

PUBLIC HOSPITALS (MINISTRY OF HEALTH AND LONG-TERM CARE)

Alexandra Hospital Ingersoll
Alexandra Marine and General Hospital
Almonte General Hospital
Anson General Hospital
Arnprior Regional Health
Atikokan General Hospital
Baycrest Centre for Geriatric Care
Bingham Memorial Hospital
Blind River District Health Centre
Bluewater Health
Brant Community Healthcare System
Brockville General Hospital
Bruyère Continuing Care Inc.
Cambridge Memorial Hospital
Campbellford Memorial Hospital
Carleton Place and District Memorial Hospital
Casey House Hospice
Chatham-Kent Health Alliance
Children's Hospital of Eastern Ontario
Clinton Public Hospital
Collingwood General and Marine Hospital
Cornwall Community Hospital
Deep River and District Hospital Corporation
Dryden Regional Health Centre
Englehart and District Hospital Inc.
Espanola General Hospital
Four Counties Health Services
Georgian Bay General Hospital
Geraldton District Hospital
Grand River Hospital
Grey Bruce Health Services
Groves Memorial Community Hospital
Guelph General Hospital
Haldimand War Memorial Hospital
Haliburton Highlands Health Services Corporation
Halton Healthcare Services Corporation
Hamilton Health Sciences Corporation
Hanover and District Hospital
Headwaters Health Care Centre
Health Sciences North
Holland Bloorview Kids Rehabilitation Hospital
Hôpital Général de Hawkesbury and District General Hospital Inc.
Hôpital Glengarry Memorial Hospital
Hôpital Montfort
Hôpital Notre Dame Hospital (Hearst)
Hornepayne Community Hospital
Hospital for Sick Children
Hôtel-Dieu Grace Healthcare
Hôtel-Dieu Hospital, Cornwall
Humber River Regional Hospital
Joseph Brant Hospital
Kemptville District Hospital
Kingston General Hospital
Kirkland and District Hospital
Lady Dunn Health Centre
Lady Minto Hospital at Cochrane
Lake of the Woods District Hospital

1. This exhibit only includes the more financially significant organizations in the broader public sector.

Lakeridge Health
Leamington District Memorial Hospital
Lennox and Addington County General Hospital
Listowel Memorial Hospital
London Health Sciences Centre
Mackenzie Health
Manitoulin Health Centre
Manitouwadge General Hospital
Markham Stouffville Hospital
Mattawa General Hospital
McCausland Hospital
Muskoka Algonquin Healthcare
Niagara Health System
Nipigon District Memorial Hospital
Norfolk General Hospital
North Bay Regional Health Centre
North Wellington Health Care Corporation
North York General Hospital
Northumberland Hills Hospital
Orillia Soldiers' Memorial Hospital
Ottawa Hospital
Pembroke Regional Hospital Inc.
Perth and Smiths Falls District Hospital
Peterborough Regional Health Centre
Providence Care Centre (Kingston)
Providence Healthcare
Queensway-Carleton Hospital
Quinte Healthcare Corporation
Red Lake Margaret Cochenour Memorial Hospital Corporation
Religious Hospitallers of St. Joseph of the Hôtel Dieu of Kingston
Religious Hospitallers of St. Joseph of the Hotel Dieu of St. Catharines
Renfrew Victoria Hospital
Riverside Health Care Facilities Inc.
Ross Memorial Hospital
Rouge Valley Health System
Royal Victoria Regional Health Centre
Runnymede Healthcare Centre
Salvation Army Toronto Grace Health Centre
Sault Area Hospital
Scarborough Hospital
Seaforth Community Hospital
Sensenbrenner Hospital
Services de santé de Chapleau Health Services
Sinai Health System
Sioux Lookout Meno-Ya-Win Health Centre
Smooth Rock Falls Hospital
South Bruce Grey Health Centre
South Huron Hospital Association
Southlake Regional Health Centre
St. Francis Memorial Hospital
St. Joseph's Care Group
St. Joseph's Continuing Care Centre of Sudbury
St. Joseph's General Hospital, Elliot Lake
St. Joseph's Health Care, London
St. Joseph's Health Centre (Guelph)
St. Joseph's Health Centre (Toronto)
St. Joseph's Healthcare Hamilton
St. Mary's General Hospital
St. Mary's Memorial Hospital
St. Michael's Hospital
St. Thomas-Elgin General Hospital
Stevenson Memorial Hospital
Stratford General Hospital
Strathroy Middlesex General Hospital
Sunnybrook Health Sciences Centre
Temiskaming Hospital
Thunder Bay Regional Health Sciences Centre
Tillsonburg District Memorial Hospital
Timmins and District Hospital
Toronto East General Hospital
Trillium Health Partners
University Health Network
University of Ottawa Heart Institute
Weeneebayko Area Health Authority
West Haldimand General Hospital
West Nipissing General Hospital
West Park Healthcare Centre
West Parry Sound Health Centre
William Osler Health System
Wilson Memorial General Hospital
Winchester District Memorial Hospital
Windsor Regional Hospital
Wingham and District Hospital
Women's College Hospital
Woodstock General Hospital Trust

SPECIALTY PSYCHIATRIC HOSPITALS (MINISTRY OF HEALTH AND LONG-TERM CARE)

Centre for Addiction and Mental Health
Ontario Shores Centre for Mental Health Sciences
Royal Ottawa Health Care Group
Waypoint Centre for Mental Health Care

CHILDREN'S AID SOCIETIES (MINISTRY OF CHILDREN AND YOUTH SERVICES)

Akwesasne Child and Family Services
Anishinaabe Abinoojii Family Services
Bruce Grey Child and Family Services
Catholic Children's Aid Society of Hamilton
Catholic Children's Aid Society Toronto
Chatham-Kent Children's Services
Children and Family Services for York Region
Children's Aid Society of Algoma
Children's Aid Society of Brant
Children's Aid Society of the City of Guelph and the County of Wellington
Children's Aid Society of Haldimand and Norfolk
Children's Aid Society of the Regional Municipality of Halton
Children's Aid Society of Hamilton
Children's Aid Society of Kawartha-Haliburton
Children's Aid Society of London and Middlesex
Children's Aid Society of Nipissing and Parry Sound
Children's Aid Society of Ottawa
Children's Aid Society of the Region of Peel
Children's Aid Society of the District of Sudbury and Manitoulin
Children's Aid Society of Thunder Bay
Children's Aid Society of Toronto
Children's Aid Society of the United Counties of Stormont-Dundas-Glengarry
Children's Aid Society of the Regional Municipality of Waterloo
Dilico Anishinabek Family Care
Dufferin Child and Family Services
Durham Children's Aid Society
Family and Children's Services of Frontenac, Lennox and Addington
Family and Children's Services of Lanark, Leeds and Grenville
Family and Children's Services Niagara
Family and Children's Services of Renfrew County
Family and Children's Services of St. Thomas and Elgin
Highland Shores Children's Aid Society
Huron-Perth Children's Aid Society
Jewish Family and Child Service of Greater Toronto
Kenora Rainy River Districts Child and Family Services
Kina Gbezhgomi Child and Family Services (Designated April 1, 2015)
Kunuwanimano Child and Family Services (Designated May 1, 2015)
Native Child and Family Services of Toronto
North Eastern Ontario Family and Children's Services
Payukotayno: James and Hudson Bay Family Services
Sarnia-Lambton Children's Aid Society
Simcoe and Muskoka Child, Youth and Family Services
The Children's Aid Society of Oxford County
Tikinagan Child and Family Services
VALORIS pour enfants et adultes de Prescott-Russell
Weechi-it-te-win Family Services
Windsor-Essex Children's Aid Society

COMMUNITY CARE ACCESS CENTRES (MINISTRY OF HEALTH AND LONG-TERM CARE)[2]

Central Community Care Access Centre
Central East Community Care Access Centre
Central West Community Care Access Centre
Champlain Community Care Access Centre
Erie St. Clair Community Care Access Centre

2. At the time this Exhibit was drafted, Bill 41, the *Patients First Act, 2016*, was introduced in the Legislature. If it is passed, the 14 Community Care Access Centres will cease to exist and the 14 Local Health Integration Networks will assume all their functions.

Hamilton Niagara Haldimand Brant Community Care Access Centre
Mississauga Halton Community Care Access Centre
North East Community Care Access Centre
North Simcoe Muskoka Community Care Access Centre
North West Community Care Access Centre
South East Community Care Access Centre
South West Community Care Access Centre
Toronto Central Community Care Access Centre
Waterloo Wellington Community Care Access Centre

SCHOOL BOARDS (MINISTRY OF EDUCATION)

Algoma District School Board
Algonquin and Lakeshore Catholic District School Board
Avon Maitland District School Board
Bloorview MacMillan School Authority
Bluewater District School Board
Brant Haldimand Norfolk Catholic District School Board
Bruce-Grey Catholic District School Board
Campbell Children's School Authority
Catholic District School Board of Eastern Ontario
Conseil des écoles publiques de l'Est de l'Ontario
Conseil scolaire catholique Providence
Conseil scolaire de district catholique Centre-Sud
Conseil scolaire de district catholique de l'Est ontarien
Conseil scolaire de district catholique des Aurores boréales
Conseil scolaire de district catholique des Grandes Rivières
Conseil scolaire de district catholique du Centre-Est de l'Ontario
Conseil scolaire de district catholique du Nouvel-Ontario
Conseil scolaire de district catholique Franco-Nord
Conseil scolaire de district du Grand Nord de l'Ontario
Conseil scolaire de district du Nord-Est de l'Ontario
Conseil scolaire Viamonde
District School Board of Niagara
District School Board Ontario North East
Dufferin-Peel Catholic District School Board
Durham Catholic District School Board
Durham District School Board
Grand Erie District School Board
Greater Essex County District School Board
Halton Catholic District School Board
Halton District School Board
Hamilton-Wentworth Catholic District School Board
Hamilton-Wentworth District School Board
Hastings and Prince Edward District School Board
Huron-Perth Catholic District School Board
Huron-Superior Catholic District School Board
James Bay Lowlands Secondary School Board
John McGivney Children's Centre School Authority
Kawartha Pine Ridge District School Board
Keewatin-Patricia District School Board
Kenora Catholic District School Board
KidsAbility School Authority
Lakehead District School Board
Lambton Kent District School Board
Limestone District School Board
London District Catholic School Board
Moose Factory Island District School Area Board
Moosonee District School Area Board
Near North District School Board
Niagara Catholic District School Board
Niagara Peninsula Children's Centre School Authority
Nipissing-Parry Sound Catholic District School Board
Northeastern Catholic District School Board
Northwest Catholic District School Board
Ottawa Catholic District School Board
Ottawa Children's Treatment Centre School Authority
Ottawa-Carleton District School Board
Peel District School Board
Penetanguishene Protestant Separate School Board

Peterborough Victoria Northumberland and Clarington Catholic District School Board
Rainbow District School Board
Rainy River District School Board
Renfrew County Catholic District School Board
Renfrew County District School Board
Simcoe County District School Board
Simcoe Muskoka Catholic District School Board
St. Clair Catholic District School Board
Sudbury Catholic District School Board
Superior North Catholic District School Board
Superior-Greenstone District School Board
Thames Valley District School Board
Thunder Bay Catholic District School Board
Toronto Catholic District School Board
Toronto District School Board
Trillium Lakelands District School Board
Upper Canada District School Board
Upper Grand District School Board
Waterloo Catholic District School Board
Waterloo Region District School Board
Wellington Catholic District School Board
Windsor-Essex Catholic District School Board
York Catholic District School Board
York Region District School Board

COLLEGES (MINISTRY OF TRAINING, COLLEGES AND UNIVERSITIES)

Algonquin College of Applied Arts and Technology
Cambrian College of Applied Arts and Technology
Canadore College of Applied Arts and Technology
Centennial College of Applied Arts and Technology
Collège Boréal d'arts appliqués et de technologie
Collège d'arts appliqués et de technologie La Cité collégiale
Conestoga College Institute of Technology and Advanced Learning
Confederation College of Applied Arts and Technology
Durham College of Applied Arts and Technology
Fanshawe College of Applied Arts and Technology
George Brown College of Applied Arts and Technology
Georgian College of Applied Arts and Technology
Humber College Institute of Technology and Advanced Learning
Lambton College of Applied Arts and Technology
Loyalist College of Applied Arts and Technology
Mohawk College of Applied Arts and Technology
Niagara College of Applied Arts and Technology
Northern College of Applied Arts and Technology
Sault College of Applied Arts and Technology
Seneca College of Applied Arts and Technology
Sheridan College Institute of Technology and Advanced Learning
Sir Sandford Fleming College of Applied Arts and Technology
St. Clair College of Applied Arts and Technology
St. Lawrence College of Applied Arts and Technology

Exhibit 4

Treasury Board Orders

Under subsection 12(2)(e) of the *Auditor General Act*, the Auditor General is required to annually report all orders of the Treasury Board made to authorize payments in excess of appropriations, stating the date of each order, the amount authorized and the amount expended. These are outlined in the following table. Although ministries may track expenditures related to these orders in more detail by creating accounts at the sub-vote and item level, this schedule summarizes such expenditures at the vote and item level.

Ministry	Date of Order	Authorized ($)	Expended ($)
Aboriginal Affairs	Jun 16, 2015	300,000	–
	Jul 14, 2015	817,400	–
	Jul 21, 2015	500,000	500,000
	Sep 15, 2015	4,000,000	4,000,000
	Jan 26, 2016	5,000,000	–
	Feb 29, 2016	1,722,200	1,586,136
		12,339,600	**6,086,136**
Agriculture, Food and Rural Affairs	Jan 26, 2016	42,600,000	37,999,518
	Mar 21, 2016	13,500,000	2,086,843
		56,100,000	**40,086,361**
Attorney General	May 26, 2015	1,000,000	–
	Sep 15, 2015	115,000	–
	Sep 15, 2015	420,000	337,000
	Dec 22, 2015	1,000,000	1,000,000
	Mar 1, 2016	37,664,800	31,538,547
	Apr 11, 2016	350,000	250,000
	Aug 23, 2016	894,700	–
		41,444,500	**33,125,547**
Cabinet Office	May 15, 2015	1,000,000	1,000,000
	Sep 11, 2015	2,000,000	1,967,367
		3,000,000	**2,967,367**
Children and Youth Services	Sep 9, 2015	250,000	–
	Feb 16 ,2016	11,032,200	8,571,923
	Mar 29, 2016	5,700,000	273,363
	Mar 29, 2016	1,500,000	860,275
	Aug 23, 2016	1,235,200	–
		19,717,400	**9,705,561**

Ministry	Date of Order	Authorized ($)	Expended ($)
Citizenship, Immigration and International Trade	Jun 11, 2015	2,970,600	2,970,600
	Jun 16, 2015	500,000	–
	Jun 16, 2015	600,000	–
	Sep 11, 2015	1,800,000	–
	Nov 23, 2015	3,504,000	3,010,494
	Feb 11, 2016	511,000	–
	Mar 1, 2016	2,876,800	2,165,951
	Mar 15, 2016	42,300	–
	Apr 5, 2016	99,500	–
		12,904,200	**8,147,045**
Community and Social Services	Feb 11, 2016	17,127,800	17,127,800
	Feb 11, 2016	3,692,200	3,692,200
	Feb 16, 2016	186,243,300	166,000,354
	Mar 22, 2016	1,500,000	–
	Mar 31, 2016	1,706,000	1,706,000
	Mar 31, 2016	4,759,000	3,769,095
		215,028,300	**192,295,449**
Community Safety and Correctional Services	Nov 17, 2015	685,000	685,000
	Mar 1, 2016	77,202,400	75,488,723
	Apr 14, 2016	7,327,000	3,439,000
	Aug 23, 2016	29,136,900	6,549,430
		114,351,300	**86,162,153**
Economic Development, Employment and Infrastructure	Jun 16, 2015	50,000	–
	Jan 26, 2016	7,000,000	2,960,356
	Jan 26, 2016	25,000,000	–
	Jan 26, 2016	74,000,000	–
	Feb 16, 2016	4,000,000	867,437
	Apr 5, 2016	1,039,600	305,539
		111,089,600	**4,133,332**
Education	Jun 16, 2015	1,000,000	1,000,000
	Jun 16, 2015	50,000	50,000
	Feb 11, 2016	4,920,700	4,920,700
	Mar 2, 2016	1,870,000	1,613,122
	Aug 23, 2016	41,467,000	22,767,450
		49,307,700	**30,351,272**
Energy	Jan 26, 2016	108,000,000	4,536,310
	Mar 22, 2016	4,500,000	–
		112,500,000	**4,536,310**
Environment and Climate Change	Jan 26, 2016	1,000,000	1,000,000
	Feb 11, 2016	3,050,000	3,050,000
	Mar 15, 2016	665,000	8,526
	Apr 12, 2016	5,500,400	5,034,642
		10,215,400	**9,093,168**

Ministry	Date of Order	Authorized ($)	Expended ($)
Finance	Oct 22, 2015	24,000,000	22,964,191
	Dec 3, 2015	3,400,000	2,937,572
	Jan 20, 2016	3,268,400	1,277,346
	Jan 26, 2016	6,000,000	3,723,110
	Mar 15, 2016	6,805,000	3,704,254
		43,473,400	**34,606,473**
Government and Consumer Services	Feb 11, 2016	1,471,600	1,471,600
	Mar 22, 2016	19,951,500	13,461,483
		21,423,100	**14,933,083**
Health and Long-Term Care	May 26, 2015	10,120,000	–
	Feb 16, 2016	1,036,550,700	1,036,550,700
	Mar 22, 2016	281,488,600	235,899,928
	Apr 12, 2016	99,500,000	84,995,449
		1,427,659,300	**1,357,446,077**
Labour	Feb 8, 2016	**150,000**	**79,449**
Municipal Affairs and Housing	Aug 25, 2015	40,284,600	38,400,913
	Aug 25, 2015	1,000	1,000
	Dec 1, 2015	280,000	276,000
	Jan 26, 2016	92,000,000	–
	Jan 26, 2016	1,820,700	–
	Feb 16, 2016	2,100,000	–
	Mar 1, 2016	4,620,000	2,591,086
		141,106,300	**41,268,999**
Natural Resources and Forestry	Oct 6, 2015	29,600,000	27,050,214
	Mar 22, 2016	8,965,200	6,606,755
		38,565,200	**33,656,969**
Northern Development and Mines	Mar 1, 2016	3,954,300	–
	Mar 22, 2016	150,000	–
	Mar 22, 2016	9,940,600	9,681,054
		14,044,900	**9,681,054**
Office of Francophone Affairs	Jun 16, 2015	**35,000**	**–**
Tourism, Culture and Sport	May 26, 2015	3,500,000	1,692,193
	Jun 16, 2015	350,000	350,000
	Sep 15, 2015	16,800,000	16,800,000
	Jan 21, 2016	3,002,500	2,985,070
	Mar 10, 2016	1,150,000	1,094,095
	Mar 22, 2016	832,000	–
	Apr 5, 2016	1,000,000	–
	Aug 23, 2016	167,205,000	140,076,168
		193,839,500	**162,997,526**

Exhibit 4

Ministry	Date of Order	Authorized ($)	Expended ($)
Training, Colleges and Universities	Jan 28, 2016	3,300,000	2,862,616
	Feb 29, 2016	1,265,000	–
	Mar 1, 2016	50,868,200	–
	Mar 22, 2016	25,116,000	8,347,908
		80,549,200	**11,210,524**
Transportation	Jun 16, 2015	160,000	160,000
	Jan 21, 2016	4,726,600	–
	Jan 26, 2016	20,000,000	20,000,000
	Mar 1, 2016	190,000,000	143,694,524
	Aug 23, 2016	55,000,000	–
		269,886,600	**163,854,524**
Treasury Board Secretariat	Oct 6, 2015	9,800,000	–
	Oct 7, 2015	7,958,100	–
	Dec 3, 2015	242,101,200	–
	Dec 3, 2015	5,910,600	2,770,491
	Dec 3, 2015	2,000,000	–
	Jan 18, 2016	3,711,700	2,915,700
	Mar 1, 2016	580,230,400	–
	Mar 1, 2016	106,338,100	–
	Mar 22, 2016	550,000	–
	Aug 23, 2016	15,383,400	–
		973,983,500	**5,686,191**
Total Treasury Board Orders		**3,962,714,000**	**2,262,110,570**

Office of the Auditor General of Ontario

Annual Report 2016

Follow-Up Reports on Value-for-Money Audits

Volume 2 of 2

Office of the Auditor General of Ontario

To the Honourable Speaker
of the Legislative Assembly

In my capacity as the Auditor General, I am pleased to submit to you Volume 2 of the *2016 Annual Report* of the Office of the Auditor General of Ontario to lay before the Assembly in accordance with the provisions of section 12 of the *Auditor General Act*.

Bonnie Lysyk
Auditor General

Fall 2016
Toronto, Ontario

Copies of this report are available from ServiceOntario: (416) 326-5300 or toll-free at 1-800-668-9938.
An electronic version of this report is available at **www.auditor.on.ca**

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Reflections

Bonnie Lysyk
Auditor General of Ontario

Reflections

At the Office of the Auditor General, we audit a wide range of services and programs delivered by government, agencies of the Crown and organizations in the broader public sector, and identify areas that need improvement. We take great care to make practical recommendations from our audit findings that these entities can implement to improve the services they provide to Ontarians.

We believe that identifying problems and offering potential solutions is only the first step; the real work begins when those responsible take action to put our recommendations into practice. It is for this reason that a key part of our Office's work is to follow up on our past audits to assess the progress made on our recommended actions.

Our follow-up work consists mainly of discussions with, and review of supporting documents provided by, the government, relevant ministries and broader-public-sector entities we've audited. We appreciate their continued co-operation in providing us with comprehensive status updates.

This year, for the first time, our Office has produced a new volume (Volume 2) dedicated to the follow-ups we have completed, including follow-up reports on our 2014 value-for-money audits, on the previously issued special reports, and on the recommendations issued by the Standing Committee on Public Accounts in the last year.

Value-for-Money Audits

This year's report contains 12 follow-up reports from the value-for-money audits published in our *2014 Annual Report*. Consistent with previous years, we note that progress has been made toward implementing the majority (75%) of our recommended actions, including 40% of them that have been fully implemented. We are encouraged by the considerable improvements made to a number of programs, including:

- **Licensed child-care facilities**—The Ministry of Education has taken action on most of our recommendations, aimed at improving the health and safety of children in child-care centres. This includes establishing an Enforcement Unit and implementing risk-based licensing to improve the inspection process for child-care centres.
- **Ontario Immigrant Nominee Program**—The Ministry of Citizenship and Immigration has either fully implemented or is in the process of implementing about 86% of our recommended actions to the program, which selects and recommends to the federal government potential immigrants who will contribute to Ontario's economy. We believe the actions taken will help ensure that qualified nominees are selected for the program and will deter immigration fraud.

- **Source water protection**—The Ministry of the Environment and Climate Change has taken considerable steps to implement recommendations we made toward the protection of existing and future sources of drinking water in Ontario. This includes approving all 22 source-water-protection plans developed for the province's 19 source-water-protection regions. In the spring of 2016, it also signed funding agreements with all 19 Source Protection Committees to help them provide support to municipalities for plan implementation.
- **Infrastructure Ontario**—Infrastructure Ontario has implemented all of the recommendations from our *2014 Annual Report* that were aimed at ensuring sufficient monitoring and tracking of the loans made under its loan program. As well, Infrastructure Ontario either has fully implemented or is in the process of implementing 83% of our recommendations relating to its Alternative Financing and Procurement (AFP) approach. For example, it has increased the threshold for AFP project delivery to $100 million. Some additional areas for improvement include gathering empirical data to support the valuation of risks in the value-for-money assessment used to justify the AFP approach, and ensuring that risks assumed to be transferred in the value-for-money assessments are reflected in the project agreements.

While we are encouraged by the progress made on many of the recommendations made in our *2014 Annual Report*, we have also noted a few areas where little or no action has been taken:

- **Immunization**—While the Ministry of Health and Long-Term Care has finalized a strategy to overhaul its immunization program, we feel that its targeted implementation date of 2020 is further away than we would expect, given the importance of the program to public health in Ontario. We also note that there has been little progress made toward implementing our recommendations relating to publicly reporting immunization rates at daycares, identifying schools with low immunization rates and providing vaccinations to all immigrants before they enter Ontario.
- **Smart meters**—About 20% of our recommendations on this initiative, which is intended to manage demand for electricity in Ontario, have been fully implemented. While the Ministry of Energy is in the process of implementing our recommendations for considering alternatives as part of the long-term energy planning process and ensuring ratepayer concerns are addressed properly and in a timely manner, little to no progress has been made to reduce the duplication of smart-meter processing costs, and ensure that Ontario's electricity supply and demand forecasts are critically re-evaluated periodically.
- **Palliative care**—The Ministry of Health and Long-Term Care has indicated that it is in the process of developing a co-ordinated system that will support more integrated delivery of palliative care (which focuses on the relief of pain and other symptoms for patients with advanced illnesses). However, since this system is still in the planning stages, none of the recommendations we made in our 2014 audit had been fully implemented at the time of our follow-up.

Special Reports

Our special reports are written at the request of the Standing Committee on Public Accounts (Committee) or by a Minister of the Crown, usually in response to topical issues of concern to the people of Ontario. **Chapter 2** of this report notes the progress made since we issued the special reports *Ontario Lottery and Gaming Corporation's Modernization Plan*, *Ornge Air Ambulance and Related Services* and *Winter Highway Maintenance*.

In our special report on the Ontario Lottery and Gaming Corporation's (OLG) Modernization Plan (tabled in April 2014), we noted that the project

timeline was ambitious and financial projections were overly optimistic. At the time of our report, OLG was expected to complete all modernization-related procurements by March 2015. It has since revised its approach and has extended its deadline for procurements to August 2018. We plan on providing another update at that time.

A follow-up to our 2012 special report on Ornge air ambulance and its related services was conducted at the request of the Committee as part of its own review of Ornge (also discussed in this report). We are encouraged that the majority of our recommendations have been either fully implemented or are in the process of being implemented. They include the Ministry of Health and Long-Term Care improving its oversight of Ornge's operations and performance, and efforts by Ornge to streamline its corporate structure and operations. We would like to see more progress made on our recommendations to assess the demand for critical-care land ambulance services and to determine the optimal number of these land ambulances needed.

The Minister of Transportation was proactive in formally requesting our Office to follow up on our 2015 special report on winter highway maintenance one year after the report. The Ministry of Transportation has fully implemented recommendations relating to improving contractor performance and public awareness of winter road conditions, and has made significant progress on making needed changes to how it manages contractors that perform winter maintenance. We recognize that, since performance-based contracts are in effect until 2026, it will take the Ministry until then to fully implement all of our recommendations.

Reports Issued by the Standing Committee on Public Accounts (Committee)

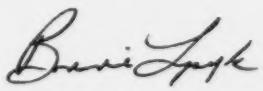
Members of the Committee, which is composed of MPPs from all parties of the Legislature and supported by its Committee Clerk and legislative researchers, are dedicated to improving government programs and services delivered to—and funded by—the people of Ontario. In addition to holding hearings on chapters in our annual reports or our special reports, the Committee makes observations and issues recommendations in its own reports, which further promote positive change by the entities we audit.

Chapter 3 of this report includes follow-ups we have conducted on the Committee's recommendation covering a wide variety of programs and services. We continue to see a positive response from government and agencies in the broader public sector to the Committee's work. In particular, we note that all actions recommended for both cancer screening programs and educational programs for Indigenous students either have been fully implemented or are in the process of being implemented. We would like to see more improvement in the Financial Services Commission of Ontario's regulatory oversight of pension plans and financial services, since nearly half of the Committee's recommendations either have not yet been implemented or are not planned to be implemented.

Acknowledgements

The information contained in both this report and **Volume 1** of our *2016 Annual Report* is the result of the excellent work of the dedicated staff of my Office. On their behalf, I would like to thank the many people in the public and broader public sectors who have assisted us in the completion of this year's follow-up reports. We look forward to continuing to serve the Legislative Assembly and, through it, the citizens of Ontario.

Sincerely,



Bonnie Lysyk
Auditor General of Ontario

Chapter 1

Follow-Up Reports on *2014 Annual Report* Value-for-Money Audits

Summary

It is our practice to make specific recommendations in our value-for-money audit reports and ask ministries, agencies of the Crown and organizations in the broader public sector to provide a written response to each recommendation, which we include in our audit reports in Chapter 3 (Volume 1) of our Annual Report. Two years after we publish the recommendations and related responses, we follow up on the status of actions taken.

In each of the follow-up reports in this Chapter, we provide background on the value-for-money audits reported on in Chapter 3 of our *2014 Annual Report* and describe the status of actions that have been taken to address our recommendations since that time, as reported by management.

Our follow-up work consists primarily of inquiries and discussions with the government, the relevant ministries or broader public sector entities, a review of their status reports, and a review of selected supporting documentation. In a few cases, the organization's internal auditors also assisted us with this work. As this is not an audit, we cannot provide a high level of assurance that the corrective actions described have been implemented effectively. The actions taken or planned may be more fully examined and reported on in future audits. Status reports will factor into our decisions on whether future audits should be conducted in these same areas.

As noted in **Figure 1**, progress has been made toward implementing 75% of our recommended actions, including 40% of them that have been fully implemented. Little or no progress has been made on 21% of our recommended actions. Four action items (1%) are no longer applicable, and a further 10 action items (3%) will not be implemented. More specific details are presented in the sections that follow **Figure 1**.

Figure 1: Overall Status of Implementation of Recommendations from Our *2014 Annual Report*

Prepared by the Office of the Auditor General of Ontario

			Status of Actions Recommended				
Report Section	# of Recs	# of Actions Recommended	Fully Implemented	In Process of Being Implemented	Little or No Progress	Will Not Be Implemented	No Longer Applicable
1.01 Adult Community Corrections and Ontario Parole Board	10	21	7.0	10.0	4.0	–	–
1.02 Child Care Program (Licensed Daycare)	10	43	27.5	9.0	4.5	2	–
1.03 Financial Services Commission of Ontario–Pension Plan and Financial Service Regulatory Oversight	9	33	17.0	4.0	11.0	1	–
1.04 Immunization	11	24	1.0	9.5	12.5	1	–
1.05 Infrastructure Ontario–Alternative Financing and Procurement	10	12	6.0	4.0	2.0	–	–
1.06 Infrastructure Ontario's Loans Program	3	3	3.0	–	–	–	–
1.07 Ontario Energy Board–Natural Gas Regulation	6	12	4.0	7.0	1.0	–	–
1.08 Palliative Care	11	21	–	12.0	9.0	–	–
1.09 Provincial Nominee Program	14	58	35.0	15.0	3.0	2	3
1.10 Residential Services for People with Developmental Disabilities	11	31	6.0	17.5	6.5	1	–
1.11 Smart Metering Initiative	11	19	4.0	8.0	3.0	3	1
1.12 Source Water Protection	10	17	7.0	7.0	3.0	–	–
Total	**116**	**294**	**117.5**	**103.0**	**59.5**	**10**	**4**
%		**100**	**40**	**35**	**21**	**3**	**1**

Chapter 1
Section
1.01

Ministry of Community Safety and Correctional Services
and Ministry of the Attorney General

Adult Community Corrections and Ontario Parole Board

Follow-Up on VFM Section 3.01, *2014 Annual Report*

RECOMMENDATION STATUS OVERVIEW					
	# of	Status of Actions Recommended			
	Actions Recommended	Fully Implemented	In Process of Being Implemented	Little or No Progress	Will Not Be Implemented
Recommendation 1	3		3		
Recommendation 2	1	1			
Recommendation 3	4	2	1	1	
Recommendation 4	1		1		
Recommendation 5	2		2		
Recommendation 6	2		1	1	
Recommendation 7	3	2	1		
Recommendation 8	1	1			
Recommendation 9	3		1	2	
Recommendation 10	1	1			
Total	**21**	**7**	**10**	**4**	**0**
%	**100**	**33**	**48**	**19**	**0**

Background

The Ministry of Community Safety and Correctional Services (Ministry) supervises and provides rehabilitative programming and treatment to adult offenders serving sentences in the community. The overall goal is to help offenders not reoffend and reduce the risk to the public. During the fiscal year of April 1, 2015, to March 31, 2016, there were 32,440 newly sentenced offenders serving community-based sentences (compared to 37,490 newly sentenced offenders from April 1, 2013, to March 31, 2014), which include probation, conditional sentences, parole and temporary absences. On an average day, the Ministry is responsible for supervising about 44,000 offenders.

The Ontario Parole Board (Board) is a quasi-judicial independent administrative tribunal that derives its authority from both federal and provincial legislation. The Board is a constituent tribunal of the Safety, Licensing Appeals and Standards Tribunal of Ontario and reports into the Ministry of the Attorney General (MAG). Ontario and Quebec are the only provinces with their own parole

boards. Other provinces have arrangements with the Parole Board of Canada.

In our *2014 Annual Report*, we concluded that overall there continues to be substantial room for improvement in the Ministry's supervision of and rehabilitative programming for offenders serving their sentences in the community. For instance, little headway had been made over the last decade in reducing the overall reoffend rate. Specifically, the overall average reoffend rate for these offenders increased slightly over 10 years from 21.2% for offenders released in 2001/02 to 23.6% for offenders released in 2010/11. We noted during this follow-up that there has been a minor improvement in the overall reoffend rates. The Ministry's latest data shows that the reoffend rate has decreased to 22.3% for offenders released in 2011/12 and 20.7% for offenders released in 2012/13. To assess the reoffend rate, the Ministry keeps track of offenders for two years after their release. The next set of data available for offenders released in 2013/14 will be available later this year.

Other significant issues reported in our *2014 Annual Report* included the following:

- Processes were not sufficient to ensure that probation and parole officers completed risk assessments for all offenders within the required six weeks of the offender's initial intake appointment with a probation and parole officer as per Ministry policy. The timely completion of this risk assessment is critical to establishing an effective offender management plan, which details supervision requirements and rehabilitation needs during the community sentence period.
- The Ministry did not have reliable and timely information on offenders who breached conditions of their release. As well, probation and parole officers did not use effective measures to ensure that more stringent conditions imposed by courts, such as curfews and house arrest, were enforced.
- We found that lower-risk offenders were often over-supervised and higher-risk offenders were under-supervised.
- Many probation and parole officers were not sufficiently trained to effectively oversee higher-risk offenders or those with mental health issues. The Ministry estimated that the number of offenders with mental health issues has grown 90% over the last 10 years to 10,000 offenders, representing at least 20% of the number of offenders supervised each day. This trend continued, and from April 1, 2015, to March 31, 2016, the Ministry supervised about 7,000 offenders with mental health issues, which represented 21.1% of the number of offenders admitted for the fiscal year.
- Rehabilitation programs intended to reduce the risk of offenders reoffending are not consistently available across the province. We found that about 40 of 100 probation and parole offices did not have core programs, such as anger management and substance abuse, available to offer to their offenders.
- The Ministry did not evaluate the quality of external rehabilitation programs to determine whether they were effective in contributing to an offender's successful reintegration into society or whether the programs were helping to reduce the reoffend rate.
- Only half the number of inmates applied to the Ontario Parole Board for a parole hearing in 2013/14 as applied in 2000/01. This continued to be the case at the time of our follow-up. Low parole participation rates can be attributed to a number of factors including shorter sentences, the lengthy and onerous process in place for inmates to apply for a parole hearing, and the low approval rate.

We made a number of recommendations for improvement and received commitments from the Ministry that it would take action to address them.

Status of Actions Taken on Recommendations

The Ministry of Community Safety and Correctional Services (Ministry) and the Ontario Parole Board (Board) provided us with information in the spring and summer of 2016 on the current status of the recommendations we had made in our *2014 Annual Report*. The Ministry has made progress in implementing most of the recommendations, with a third of the recommendations fully implemented. However, there has been little or no progress on others. The Ministry informed us that the delay in implementing some of our recommendations was due to a prolonged collective bargaining process with the Ontario Public Service Employees Union that began in November 2014 and lasted for 15 months.

We noted that the Ministry has fully implemented our recommendations with respect to:

- completing risk assessments and offender management plans;
- identifying ways to better distribute the workload among probation and parole officers;
- ensuring that offender information shared with private service providers is adequately protected;
- ensuring employees have proper levels of security clearance before they receive access to the Offender Tracking Information System (OTIS); and
- ensuring that information system projects adhere to Ontario Public Service project management standards.

Also with the support of the Ministry of Community Safety and Correctional Services (Ministry), the Ministry of the Attorney General led a review of the mandate of the Ontario Parole Board to assess cost-effectiveness, benefits and any barriers that have been or are expected to be created as a result of the decision to change the Board's reporting and accountability relationship. The report of this mandate review was released in December 2015.

The Ministry was in the process of implementing more than half of our recommendations, mainly in the areas of:

- targeting its resources, programs and services to higher-risk offenders;
- conducting a jurisdictional scan to analyze Ontario's expenditures and program outcomes;
- working with other jurisdictions to develop common measures for results reporting;
- developing an action plan to address the risks and needs of offenders with mental health issues; and
- addressing long-standing security issues regarding OTIS.

However, the Ministry has made little to no progress with respect to:

- ensuring that untrained probation and parole officers follow Ministry policy to ensure that when they supervise higher-risk cases, they are routinely consulting with trained staff members and are documenting the results of the consultations;
- formally tracking the number of offenders who attend and complete externally sourced programs and assessing the effectiveness of these programs; and
- ensuring that there is sufficient support at each correctional institution to assist inmates who want to apply for parole or temporary absence, and tracking and assessing the delays in completing the parole and temporary absence program applications and the reasons for the high denial rates.

The status of the actions taken on each recommendation is described in the following sections.

Recommendation 1

In order for the Ministry of Community Safety and Correctional Services to enhance community safety through effective supervision and by reducing reoffend rates of offenders serving their sentences in the community, it should:

- *strategically target its resources, programs and services to higher-risk offenders, with a long-term goal of reducing their high reoffend rates;*
  Status: In the process of being implemented by September 2018.

Details

During our 2014 audit, we found that, although there was a small improvement in the reoffend rate between 2002 and 2011, the rates for reoffending remained significant for medium-, high- and very-high-risk offenders. These minimal improvements indicated that the Ministry's rehabilitation programs and its approach to changing offenders' behaviour after supervision needed to be more effective.

Since our audit, in January 2015, the Ministry hired 13 new program delivery officers to conduct rehabilitative programming specifically for medium- to high-risk offenders. Programs include anger management and sexual offender relapse prevention. As part of their responsibilities, program delivery officers also conduct gap analysis of rehabilitative programs to identify and recommend any changes and additions to current programs. In April 2016, the Ministry also hired two new program managers to oversee these initiatives and to provide support to the new program delivery officers.

Because reoffend rates are measured two years after programs are completed, the Ministry was not able to provide data, as of our follow-up, on how effective these new initiatives and additional resources had been in reducing the rates.

In June 2015, the Ministry began rolling out a new training program for its probation and parole officers. Developed by Public Safety Canada, the program is designed to target the rehabilitation of medium- to high-risk offenders. Training has started in the Eastern Region, with the expected completion by September 2018. The Ministry plans to incrementally train all its officers over the next six years.

The Ministry also informed us that it is on target to complete the automation of its Low Risk Identifier (LRI) tool by December 2016. Once automated, the Ministry hopes to realize efficiencies in the form of additional resources that it plans to redirect toward working with medium- to high-risk offenders.

- *compare and analyze Ontario's expenditures and program outcomes for supervising and rehabilitating offenders with other jurisdictions to assess whether the programs are delivering services cost-effectively; and*
  Status: In the process of being implemented by December 2016.

Details

During our 2014 audit, we found the Ministry lacked data for comparing its performance to other provinces (for example, comparing reoffend rates and successful completions of community-based sentences). As a result, the Ministry was not able to assess whether Ontario's lower operating cost for community supervision and rehabilitation programs meant those programs actually are cost-effective or it is not investing enough in them.

At the time of our follow-up, the Ministry was in the process of analyzing Ontario's expenditures and program outcomes for supervising and rehabilitating offenders against those of other Canadian jurisdictions. Preliminary results based on information collected from six jurisdictions (Canada nationally, Quebec, British Columbia, Alberta, Saskatchewan and Yukon) show that Ontario had the third-highest 2014/15 per diem rate for community supervision, at $6.68. Quebec reported the lowest per diem rate of $3.69, and Alberta reported the highest at $7.73 (as of 2011/12). The Ministry was expecting to complete its analysis by the end of 2016 once it receives program outcomes from other jurisdictions. Once it completes its analysis, the Ministry plans to discuss the results at future Heads of Corrections meetings.

- *work with other provincial and federal community correctional counterparts to develop common measures to use to publicly report on its program results and set targets for improvements, particularly for its reoffend rate.*
  Status: In the process of being implemented. Timeline is not within the Ministry's control as this work is being led by the Canadian Centre for Justice Statistics.

Details

During our 2014 audit, we found that Canada had no common, generally accepted way to measure the reoffend rate of offenders under supervision and that some provinces do not track it at all. Ontario tracked only new offences that occur after the supervision period, and only for a limited time period.

Since our audit, in November 2015, the Ministry joined a project led by the Canadian Centre for Justice Statistics. The objective of this project is for provinces to share data on recontact rates. It will also look at the proportion of people who had recontact with one or more justice sectors, which include police, courts and corrections, for a two-year follow-up period. Data from this project will then be used to develop standardized, common indicators to allow provinces to compare and publicly report statistical information related to corrections.

In April 2016, the Ministry also began publicly posting reoffend rate information, which it said it plans to do annually.

Recommendation 2

In order to ensure timely assessment of risks to the public of offenders supervised in the community and to establish the appropriate level of supervision and rehabilitation programming and services needed, the Ministry of Community Safety and Correctional Services should strengthen its systems and procedures to allow management to routinely make sure that probation and parole officers have completed and updated all required risk and needs assessments and offender management plans, particularly for higher-risk offenders.

Status: Fully implemented.

Details

During our 2014 audit, we found that probation and parole officers did not consistently complete offender risk assessments and management plans, even though Ministry policy required a probation and parole officer to complete the risk and needs assessment within six weeks of a new offender's intake appointment.

Following our audit, the Ministry prepared a report on the completion rates of all required risk and needs assessments and offender management plans. It indicated that managers reviewed about 4,000 cases in the 2014/15 fiscal year and that the overall target for compliance was substantially met (ranging between 75% to 94% among the regions). In the 2015/16 fiscal year, managers reviewed 3,865 cases and the overall target for compliance was again substantially met.

In June 2016, the Ministry developed a new quarterly report that identifies the risk and needs assessments and offender management plans that were not completed or were completed late. The Ministry said that this report is shared with regional managers, who are required to follow up on and resolve concerns directly with the responsible probation and parole officers.

In July 2016, the Ministry also began streamlining its case management policies to make them more consistent and help area managers ensure that probation and parole officers comply with policy.

Recommendation 3

In order to ensure that offenders serving sentences in the community are properly supervised and that conditions of their release are adequately monitored and enforced, the Ministry of Community Safety and Correctional Services should:

- *conduct an assessment of the conditions imposed on offenders and whether probation and parole officers have the necessary information and monitoring tools to assure compliance;*
  Status: In the process of being implemented by December 2016.

Details

During our 2014 audit, we found the Ministry did not have reliable and timely information on offenders who breach conditions and what probation and parole officers did about these breaches. Having this information would enable the Ministry to track the percentage of offenders who successfully complete their community sentences without breaching any conditions, as well as identify the conditions that are commonly violated and improve its oversight of offenders violating the conditions.

Since our audit, in 2015, the Ministry conducted an assessment on the most common conditions imposed on offenders, as well as the most common reasons for breaches of probation orders and conditional sentences.

In February 2016, the Ministry surveyed probation and parole managers to, among other things, determine the role of police partners in monitoring and laying charges in breaches of certain probation or parole conditions. The Ministry was still analyzing the information, but early results showed that approximately 90% of area offices had relationships with local police that included police monitoring and enforcing house arrest and curfew conditions. The Ministry said it is using information from the survey to identify whether probation and parole officers have the necessary information and monitoring tools to ensure that offenders are complying with the conditions imposed on them. Once this is done by the end of 2016, the Ministry plans to develop action plans to address any gaps.

- *effectively oversee probation and parole officers' activities, including more frequent and timely reviews of officers' handling of cases, improvements to ongoing management reporting of case activities, and periodic independent reviews of cases by someone other than the responsible area manager;*
  Status: Fully implemented with ongoing review.

Details

During our 2014 audit, we found that the Ministry's annual and periodic case management reviews noted many occasions when probation and parole officers did not comply with policies. In some of these cases, offenders committed serious crimes. Some of the deficiencies noted were poor supervision of sex offenders, over-supervision of low-risk offenders and under-supervision of higher-risk offenders.

Since our audit, beginning in 2015, the Ministry assigned dedicated staff (other than the responsible area managers) to conduct periodic independent reviews of probation and parole officers' handling of cases, and of the timeliness of their completion of risk assessment and offender management plans. This practice of completing independent reviews will continue. To further strengthen compliance, the Ministry now monitors on a quarterly basis the case review completion rate of each region by gathering and reviewing information on the number of probation and parole officers in the region, the number of case reviews to be done, and actual number of case reviews completed.

- *ensure that its probation and parole officers have the required knowledge and skill beforehand to supervise higher-risk offenders; and*
  Status: Little or no progress.

Details

In our 2014 audit, we reported that in only 4% of cases we sampled was there an indication that a probation and parole officer who was supervising an offender with a profile for which they had not received the proper training had consulted with an officer who had such training, as required by policy.

The Ministry conducted an audit of 28 untrained probation and parole officers in October 2015 that showed that compliance with this policy remains

low, as less than a quarter of these officers consulted with their managers or a trained officer. Although the Ministry told us that managers had discussions with those officers who were found to be non-compliant, the audit revealed that those 28 probation and parole officers assigned to higher-risk cases did not have the required knowledge or skill to supervise these offenders. In addition, it also revealed that in the majority of cases, the officers did not consult with their managers or other trained officers, and in some circumstances where they had, these consultations were not documented. The Ministry plans to conduct the next audit in fall of 2016; however, at the time of our follow-up, it was not planning to increase the number of untrained officers it planned to audit or the frequency of the audits.

- *identify ways to better distribute the workload among probation and parole offices, and adjust staffing levels as soon as possible.*

  Status: Fully implemented.

Details

During our 2014 audit, we assessed whether high workloads at certain probation and parole offices were the reason that probation and parole officers did not always follow required supervision policies and procedures. We found that this was possibly the case in some offices but not in all.

Since our audit, the Assistant Deputy Minister of Correctional Services and regional directors have continued to meet at least twice a year to analyze the workload and caseload numbers and address high workloads. Three meetings took place in 2015, and vacant positions in offices with lower workloads were reassigned to offices needing more staff to deal with workload pressures.

To further address workload pressures, the Ministry started to hire 25 additional probation and parole officers in April 2016. Most of the new officers had been hired when we completed our follow-up.

Recommendation 4

In order to effectively address the risks and needs of offenders with mental health issues, the Ministry of Community Safety and Correctional Services should establish a Ministry-wide strategy that includes training for probation and parole officers to recognize, supervise and assist these offenders, and that provides the resources and tools to support the officers and offenders. Once the strategy is implemented, the Ministry should track and measure the effectiveness of its programs and services specifically provided to offenders with mental health issues.

Status: In the process of being implemented by 2021.

Details

We reported in our 2014 audit that offenders with mental health issues had a significantly higher average reoffend rate than the average reoffend rate for all other offenders. The Ministry did not have a provincial strategy to address mental health and related issues for offenders under community supervision and did not know whether its programs and services in this area were effective.

Since our audit, in early 2016, the Ministry established a working group to develop a multi-year mental health action plan, which had met several times. The action plan will update and develop training, tools and resources for probation and parole officers who supervise and assist offenders with mental health issues. Once completed, the action plan will be presented to the Community Services Executive Committee for review and approval. The plan's rollout is scheduled to start in 2017, and it is to be fully implemented by 2021.

The Ministry told us it will track and measure the effectiveness of the programs and services coming out of the action plan.

Recommendation 5

To ensure equitable access to effective rehabilitative programs for offenders, the Ministry of Community Safety and Correctional Services should:

- *regularly track the availability of and wait times for rehabilitative programs and services for offenders under its supervision across the province, identify areas where assessed offenders' rehabilitation needs are not being met, and address the lack of program availability in these areas; and*

  Status: In the process of being implemented by March 2017.

Details

We noted in our 2014 audit that in December 2012, the Ministry trained area managers to conduct an analysis of whether rehabilitation programming was lacking in their areas (based on what rehabilitation needs were not being met). During our audit, we found that only 35 of more than 100 offices had completed full analyses of program availability.

Since our audit, by mid-2015, all offices had completed the analysis of program availability. The Ministry told us at the time of our follow-up that regions were addressing identified programming gaps and that this work would be an ongoing activity.

During our 2014 audit, all five offices we visited indicated that several popular programs, particularly those delivered by external service providers, had long wait times of up to several months but that they did not formally monitor these wait times.

By March 2017, the Ministry will introduce a new "Waiting List by Program" function in the Offender Tracking Information System (OTIS). OTIS is used to track and manage the case records and activities of all adult and young offenders during their time served in custody and/or in the community. The new function identifies offenders who have been referred to a core program and the duration of time they are on the wait list.

- *ensure it has sufficient and timely information for evaluating its core rehabilitative programs and that it implements changes to help improve their effectiveness in reducing reoffend rates.*

  Status: In the process of being implemented by November 2016.

Details

During our 2014 audit, we found that the Ministry had an internal accreditation process to help ensure its core rehabilitation programs satisfy standards that make them effective in reducing the reoffend rate. However, the Ministry indicated that, as of April 2014, only two of its 14 core programs had achieved accreditation (based on evaluations of their outcomes in reducing the reoffend rate).

In June 2016, the Ministry updated its accreditation process for core rehabilitation programs. One improvement coming out of this update will be the matching of accreditation requirements to the level of intensity of the rehabilitation program. That is, intensive programs will have different accreditation requirements than general orientation programs. Intensive level programs are skill-based, while general orientation level programs are meant to motivate offenders to take part in more intensive level programs. This will enable the Ministry to better evaluate the programs using evidence-based practice and to conduct outcome evaluations to ensure programs are having the intended effect. Beginning in November 2016, the Ministry will use the new process to accredit the remaining programs.

Recommendation 6

To help ensure that programs delivered by external service providers are effective in reducing the reoffend rate and that their funding is commensurate with the value of service provided, the Ministry of Community Safety and Correctional Services should:

- *more formally track the number of offenders who attend and complete externally sourced programs, and assess the effectiveness of these programs; and*

  Status: Little or no progress.

Details

In our 2014 report, we noted that the Offender Tracking Information System (OTIS) did not track the number of offenders who completed core agency or community programs. As a result,

the Ministry had to manually keep track of each offender's progress; however, the tracked information was incomplete.

At the time of our follow-up, offenders' progress was still tracked manually. The current version of OTIS was implemented in June 2016. After a sufficient period of stability post-implementation of the current version of OTIS, the Ministry said that it explored the possibility of more formally tracking offenders' progress in OTIS. Progress in this area is not anticipated until March 2018 at the earliest.

In February 2016, the Ministry created a working group to develop a phased-in plan to formally evaluate a selected number of outsourced and community-based programs. The Ministry estimates such evaluation will take five to six years. The Ministry also hired four new managers to improve management of contracts with external program providers.

- *ensure that approved funding to agencies is comparable to that of programs of a similar nature and size across the province, and is based on the actual usage by offenders.*
  Status: In the process of being implemented by April 2018.

Details

In 2015, the Ministry revised the program descriptions of contracts for various programs such as anger management and substance abuse. These revisions included being more specific about what was expected of external providers and making funding more comparable for programs of similar nature and size. In addition, the Ministry's quality assurance managers for each region will reconcile billing to service provided prior to payment. The Ministry told us that the revised contracts would be rolled out during the next contract cycle, which is scheduled to start in April 2017 and end in April 2018.

Recommendation 7

To better secure and protect offenders' and victims' information, the Ministry of Community Safety and Correctional Services should:

- *address the long-standing security issues regarding its Offender Tracking Information System (OTIS);*
  Status: In the process of being implemented by March 2017.

Details

As part of a major system upgrade, in June 2016, the Ministry upgraded OTIS with new security features, such as data encryption and a high-security data integrity tool. The upgrade also included transitioning generic accounts to named user accounts. The Ministry anticipates that all these new security features will become fully functional by March 2017, after a required post-implementation system stability period. Since July 2015, the Ministry also addressed issues regarding password management by adopting Ontario Public Service security requirements. OTIS users are now required to change their passwords every 60 days and all passwords must consist of a minimum of eight characters.

- *ensure that it has reliable assurances that offender information shared with private service providers is adequately protected; and*
  Status: Fully implemented.

Details

During our 2014 audit, we found that the Ministry could not ensure that information on offenders who were electronically monitored by a private service provider was secure. The Ministry also did not know if criminal record checks were done for personnel employed by this service provider. We further found that the Ministry was not reviewing the monthly operational reports it received from this service provider.

The Ministry told us that it began regularly meeting with and monitoring the service provider

after the audit, and that no private-information breaches have been reported. The Ministry also told us that offender data is encrypted in accordance with its policy and that the private contractor responsible for the host server that stores this data does not have access to it.

The Ministry now also has up-to-date criminal record checks on file for all service provider personnel who have access to offender data. In addition, the Ministry assigned a contract compliance manager to review the service provider's monthly operational reports and now requires that all issues be resolved with the service provider prior to the approval of the monthly invoice.

- *ensure that proper levels of security clearance are in place for all government and contract employees before they receive access to OTIS and other offender and victim information systems.*
  Status: Fully implemented.

Details

OTIS is maintained by the Justice Technology Services Division. During our audit in 2014, we found that the Division could not demonstrate that it had valid background checks for 40% of its more than 300 information technology employees. The Ministry informed us that during 2015, it worked to correct this and that all Division employees (including consultants) who use OTIS now have appropriate police background checks and security clearance. The Ministry also told us it has worked with Infrastructure Technology Services to implement new processes and forms to ensure that user accounts can be readily activated and deactivated based on Ministry requirements.

Recommendation 8

To ensure that information system projects adhere to Ontario Public Service project management standards, are delivered on time and within budget, and meet user expectations, the Ministry of Community Safety and Correctional Services should coordinate with the Justice Technology Services Division to establish project baselines for scope, budget and schedule; monitor progress and costs regularly against project milestones and budgets; and document and justify any significant changes against the initial deliverables.

Status: Fully implemented.

Details

In November 2015, the Ministry and the Justice Technology Services Division implemented a joint planning process and governance structure to establish project portfolios and budget allocation on a priority basis. Furthermore, the Division implemented monthly dashboards to report on project status, finance, scope and project milestones. The Division has also implemented a project management tool to keep track of and report on all projects. These enhancements were implemented across projects that the Division supports, which includes OTIS.

Recommendation 9

In order to help more inmates reintegrate into society while protecting public safety and reducing incarceration costs and overcrowding in correctional facilities, the Ontario Parole Board should work collaboratively with the Ministry of Community Safety and Correctional Services to:

- *provide sufficient support at each correctional institution to assist inmates who want to apply for parole or temporary absence;*
  Status: Little or no progress.

Details

During our 2014 audit, we found that staffing resources to help inmates apply for parole or temporary absence varied greatly across correctional institutions. We also found that institutions with proportionately fewer institutional liaison officers had fewer inmates applying for parole.

Since our audit, the Ministry has made little progress to ensure that there is sufficient support at each correctional institution to assist inmates who

want to apply for parole or temporary absence. The Ministry told us that the delay in responding to our recommendations was caused by the prolonged bargaining process. The Board informed us that it provided additional updated information to inmates that should help them better understand the parole and temporary absences application process.

There were discussions in 2014 between the Board and the Ministry on the possibility of a pilot project on expediting temporary absences, but this project will not be implemented. We were informed that the Transformation Secretariat is looking at a number of options related to alternatives to incarceration.

- *track and assess the delays in completing the parole and temporary absence program applications and the reasons for the high denial rates for parole, using this information to streamline the processes and improve the quality of applications from inmates; and*

  Status: Little or no progress.

Details

We noted in our *2002 Annual Report* that the reintegration of offenders into the community was impacted by a significant reduction in the number of eligible inmates being considered for parole. During our 2014 audit, we found that the situation had worsened and that the Ministry did not track and assess delays in offenders completing their parole and temporary absence applications and the Board did not track the reasons for the high denial rates for parole.

Since then, the Ministry and the Board have made little progress in this area. The Ministry told us that the Institutional Liaison Officer Review Committee is planning to analyze reasons for delays in the parole and temporary absence program application process to see if efficiencies can be achieved. However, this work was put on hold due to the prolonged collective bargaining process. While the Board tracks grant and denial rates for parole, this data alone is insufficient in identifying the reasons for the high parole denial rates.

- *consider the cost-effectiveness of reintroducing halfway housing for parolees.*

  Status: In the process of being implemented by April 2017.

Details

During our 2014 audit, we found that, in some cases, parole applications were denied because the offender's release plan lacked suitable housing. Ontario discontinued the use of community-based residential facilities (also called halfway houses) in the mid-1990s. Halfway housing provided a bridge between the institution and the community through gradual, supervised release. Our 2014 discussions with the Board indicated that the use of halfway housing could increase the number of inmates granted parole, especially in the case of inmates who are denied parole because they have no confirmed residence plan and/or programming available in the community.

In the summer of 2016, the Transformation Secretariat consulted with internal stakeholders and inter-ministerial partners. It will also consult with academic experts and community agencies to explore opportunities for an integrated case management team approach that supports unique client needs. The Ministry told us that the Transformation Secretariat will continue to explore the expanded use of community residential alternatives, such as healing lodges and housing alternatives for parolees. The Transformation Secretariat will complete the consultations and develop the strategy by April 2017. However, the strategy is a long-term plan that will take 10 to 20 years to fully implement.

Recommendation 10

In view of the Ontario Parole Board's concerns with the recent decision to change its reporting and accountability relationship from the Ministry of Community Safety and Correctional Services to the

new Safety, Licensing Appeals and Standards Tribunals Ontario cluster of the Ministry of the Attorney General, the Board and the two ministries should collaborate to conduct a review of the cost-effectiveness, benefits and any new barriers that have been or are expected to be created by this decision, and whether this change will improve the operations of the Board.
Status: Fully implemented.

Details

We noted in our 2014 audit that on April 1, 2013, the Safety, Licensing Appeals and Standards Tribunals Ontario (SLASTO) was created under the Ministry of the Attorney General as an adjudicative tribunal cluster under the *Adjudicative Tribunals Accountability, Governance and Appointments Act, 2009*. The Act was established to have tribunals administered under a common organization (or "cluster") to allow them to operate more efficiently and effectively than they would on their own. The Ontario Parole Board was one of five tribunals transferred to SLASTO. As a result, the Board no longer reports to the Minister of Community Safety and Correctional Services. The Board strongly protested being included in the cluster and reporting to a different ministry, and called for a review of this decision. The Board identified that it did not have the same administrative and training needs as the other tribunals in the cluster.

Since then, with the support of the Ministry of Community Safety and Correctional Services (Ministry), the Ministry of the Attorney General led a review of the mandate of the Ontario Parole Board in 2015. The Attorney General ministry engaged an external reviewer to complete this mandate review and also asked the reviewer to answer specific questions regarding the recommendations we made in our 2014 audit. The external reviewer noted that, overall, it appeared that the decision to change the reporting and accountability relationship of the Board from the Ministry to the Safety, Licensing Appeals and Standards Tribunals Ontario cluster of the Attorney General ministry has been beneficial to the Board, although there were many challenges in terms of management and amalgamating the cultures of the two organizations. However, the external reviewer did not believe the challenges were significant enough to warrant a different structure because the change appeared to better support independent decision-making, operational accountability and cost-effectiveness.

Chapter 1
Section
1.02

Ministry of Education

Child Care Program (Licensed Daycare)

Follow-Up on VFM Section 3.02, *2014 Annual Report*

RECOMMENDATION STATUS OVERVIEW					
	# of	Status of Actions Recommended			
	Actions Recommended	Fully Implemented	In Process of Being Implemented	Little or No Progress	Will Not Be Implemented
Recommendation 1	4	3.0		1.0	
Recommendation 2	6	4.0	1	1.0	
Recommendation 3	4	2.0	1		1
Recommendation 4	4	3.0	1		
Recommendation 5	5	2.0	2	1.0	
Recommendation 6	4	4.0			
Recommendation 7	3	1.0	1	1.0	
Recommendation 8	4	2.5	1	0.5	
Recommendation 9	6	4.0	1		1
Recommendation 10	3	2.0	1		
Total	**43**	**27.5**	**9**	**4.5**	**2**
%	**100**	**64**	**21**	**10**	**5**

Background

The Ministry of Education (Ministry) is responsible under the *Child Care and Early Years Act* (which replaced the *Day Nurseries Act* on August 31, 2015) and its regulations for ensuring the safety of children in licensed child care operations. These responsibilities include issuing and renewing child care operator licences, inspecting and monitoring licensed facilities, gathering information on serious occurrences in licensed facilities, and investigating complaints.

There are two types of licensed child care operations in Ontario: centre-based and home child care agencies (previously referred to as private-home daycare agencies). Both centre- and home-based care is provided by for-profit and not-for-profit operators, municipalities and First Nations bands. Home child care agencies co-ordinate home-based child care at private residences, with each home caring for six or fewer children. **Figure 1** shows the number of licensed child care centres and home child care agencies in Ontario, along with the system's total licensed capacity, as of March 2014 and March 2016.

Figure 1: Centre-Based Child Care and Home Child Care Agencies in Ontario, 2014 and 2016
Source of data: Ministry of Education

	March 31, 2014			March 31, 2016		
Type of Facility	Licences Issued	# of Locations	Licensed Capactiy	Licences Issued	# of Locations	Licensed Capactiy
Centre-based child care	5,069	5,069	317,868	5,276	5,276	389,286
Home child care	126	5,765	16,142*	122	7,504	29,266*
Total	**5,195**	**10,834**	**334,010**	**5,398**	**12,780**	**418,552**

* Estimated by the Ministry.

In our *2014 Annual Report*, we found that the Ministry needed to do significantly more to reduce the risk and incidence of serious occurrences to children by ensuring that licensed child care operators protect the health, safety and well-being of children in their care. The Ministry could do this by strengthening its inspection processes and related enforcement actions over licensed child care operators.

More than 29,000 serious occurrences were reported to the Ministry by licensed child care operators between January 1, 2009, and May 31, 2014. Serious occurrences include a serious injury to a child, abuse of a child, a child gone missing, fire or other disaster, and physical or safety threats on the premises.

We found that many of these incidents were not reported to the Ministry on a timely basis and that child care operators may not be reporting all serious occurrences to the Ministry.

As well, we noted cases where the same concerns about child health, safety and well-being were noted in multiple inspections, but only a limited number of actions were taken in response over the last five years.

Although the current legislation outlines grounds on which the Ministry can revoke or refuse to renew a licence, we noted there were no guidelines to help staff determine when such enforcement actions would be appropriate.

Other significant issues included the following:

- Over the last five years, program advisors had not inspected about one-third of child care operators before their licences expired. As well, we found many examples where operators with ongoing child health and safety concerns were not being monitored any more closely than well-run child care centres. For example, our sample of operators with provisional licences—operators considered to be high risk—found that more than 80% of them were not inspected until after their licence had expired. Therefore, there was no timely verification that the previously noted safety concerns had been resolved.
- Ontario did not require child care operators and their staff to obtain vulnerable-sector police checks, which are required in Alberta and Saskatchewan. These checks are more thorough than criminal reference checks, and are designed to screen people who work with children or others considered at greater risk than the general public. A vulnerable-sector check is already required by Ontario's Ministry of Health and Long-Term Care for people seeking employment in long-term-care homes.
- The caseloads of Ministry program advisors, who carry out licensing, inspection, complaint and serious occurrences duties, had been growing significantly. Since 2005, the number of child care operators increased by 33%, while the number of program advisors remained relatively constant. As a result, over

half of the program advisors were responsible for the inspection and oversight of more than 100 child care centres each, compared to an average caseload of 65 centres per advisor in 2005.

- Program advisors exercised a great deal of discretion during the course of their work because Ministry policies and guidelines were often vague or nonexistent. For example, there were no guidelines on how to verify that medications, cleaning supplies and other hazardous substances were properly stored and inaccessible to children. We noted that program advisor verification could range from minimal to thorough.

On August 31, 2015, the *Day Nurseries Act* was replaced with the *Child Care and Early Years Act, 2014* (Act), which together with its regulations now outlines the requirements for the health, safety and well-being of children in licensed child care facilities.

The Ministry is phasing in the new legislation over two years, with all requirements to be implemented by September 1, 2017. The most significant changes from the *Day Nurseries Act* and its regulations are in the areas of staff screening measures and criminal reference checks, enforcement, and children's programs.

We made 10 recommendations, consisting of 43 actions needed for improvement, and received the Ministry's commitment that it would take action to address them.

Status of Actions Taken on Recommendations

The Ministry of Education provided us with information in the spring and summer of 2016 on the current status of our recommendations. According to that information, the status is that 85% of our recommended actions are either "fully implemented" or "in the process of being implemented."

Since our audit in 2014, the Ministry has established an Enforcement Unit and implemented a tiered (risk-based) licensing approach for the inspection of child care centres. It has also drafted several program directives in areas such as serious occurrences and complaints, processing new licensing applications, and police record checks.

However, little progress has been made on 10% of our recommended actions, including some that pertain to performance measures, and new applicants. Specifically, the Ministry has more work to do in the areas of developing guidelines to help program advisors assess whether applicants are sufficiently competent to establish child care operations. It also has more to do to develop performance measures to evaluate all aspects of the Ministry's vision, including the quality and accessibility of child care.

Two recommendations will not be implemented. These pertain to developing a risk-based approach for the inspection of home child care agencies, and posting serious occurrences online. We continue to believe that a risk-based approach to inspections should be implemented for home child care agencies, which care for about 29,300 children. We also believe that serious occurrences should be posted online because a parent has the right to know this information when making their child care choice.

The status of the actions taken on each recommendation is described in the following sections.

Program Effectiveness and Reporting

Recommendation 1

To help ensure the delivery of a high-quality, accessible and co-ordinated child care system in Ontario that encourages child cognitive, language and social development, the Ministry of Education should:

- *develop a detailed plan for completing the implementation of the remaining medium term actions from* Modernizing Child Care in Ontario, *including putting mandatory*

provincial program guidelines in place and improving data collection, evaluation and reporting;

Status: Fully implemented.

Details

In spring 2016, the Ministry approved a plan for completing implementation of the remaining medium-term actions from *Modernizing Child Care in Ontario*, a 2012 discussion paper that detailed the government's long-term vision for child care.

The plan included putting mandatory provincial program guidelines in place, and improving data collection, evaluation and reporting. On August 31, 2015, mandatory provincial program guidelines were introduced and are outlined in the regulations to the new *Child Care and Early Years Act*.

The Ministry also improved the collection, evaluation and reporting of data for licensed child care in Ontario. However, it said that it would take longer to implement other actions in the plan such as assigning children in licensed child care an Ontario Education Number, and reviewing and updating the special needs resourcing program. The Ministry told us that work on these actions is under way, but more consultations and decisions were needed before it could determine when they would be fully implemented.

- *develop more useful guidance to assist program advisors to more consistently evaluate child care programs being delivered to ensure that those programs meet expectations for effective child development;*

  Status: Fully implemented.

Details

In our *2014 Annual Report*, we reported that the 2012 discussion paper, *Modernizing Child Care in Ontario*, noted that over the next three years, a mandatory provincial program guideline would be developed for child care operators to enhance program quality and consistency.

In April 2014, the Ministry released *How Does Learning Happen?*, a resource document that discusses learning through relationships for those who work with young children and their families. The document was intended to support teaching and curriculum development in early-years programs. However, at the time of our audit, implementation of this guideline was optional, and the Ministry had not determined when, or even if, implementation would become mandatory.

Since our audit, the Ministry has implemented new legislative requirements for child care programs that it outlined in the regulation to the new *Child Care and Early Years Act*. Starting on August 31, 2015, the Ministry made it mandatory for licensed child care operators to implement the *How Does Learning Happen?* program guideline for child care programs. Specifically, in addition to developing a program statement that is consistent with the Ministry-developed resource guide, licensed child care operators are also now required to develop goals and implement strategies (defined by the Ministry as observable measurable actions) to achieve program goals for 10 specific criteria, including:

- promoting the health, safety, nutrition and well-being of children;
- fostering children's exploration, play and inquiry; and
- planning for and creating positive learning environments and experiences that support every child's learning and development.

In addition, operators are now required to document the actions they have taken to achieve the program goals, and to review the impact these actions are having on children and their families. Program advisors are now required to verify during on-site inspections that operators do in fact have documented strategies in place to review the impact that their actions are having on children and their families.

- *collect and analyze all relevant information about child care operators to assist with program management and oversight; and*

  Status: Fully implemented.

Details

Since our audit in 2014, the Ministry has started collecting and recording better information to assist in the day-to-day management of the child care program, and to improve its oversight of the program. Specifically, since December 2014, the Ministry has been able to generate numerous standard management reports from the Child Care Licensing System on serious occurrences, complaints, expired licences, new licence applications, and staff caseloads, at both a summary level and a detailed level.

The Ministry's corporate office regularly prepares regional-level summary reports from the information stored in the licensing system, and shares it with regional managers at periodic meetings. If any concerns are identified, regional managers are instructed to further investigate and take appropriate action if warranted.

Some examples of these summary reports include:

- the average number of days it takes to process new applications for licences;
- the average number of days it takes to resolve serious occurrences and complaints;
- the percentage of licences expired without a renewal inspection conducted, and the average number of days the licences have been expired; and
- the number of days taken to complete licensing renewal inspections.

The Ministry told us regional managers are also expected to regularly review child care program information to assist them in overseeing and managing child care operators in their region.

In addition, since our audit the Ministry has been able to capture and report program-specific information, including the total capacity at each child care facility, the status of any inspections performed by program advisors, and the type of licence issued to each child care operator (regular, provisional, or short-term).

- *develop performance measures for assessing progress toward the government's long-term vision for child care and periodically report on these measures publicly.*

Status: Little or no progress.

Details

The Ministry's long-term vision for child care is to build a high-quality, accessible and co-ordinated early learning and child care system that focuses on encouraging learning in a safe, play-based environment that provides for the healthy physical, social, and emotional and cognitive development of children.

In February 2015, the Ministry developed a Child Care Output and Outcome Monitoring Strategy (Strategy) that identified child care performance measures for the licensed child care program. These include the percentage of staff working in the licensed child care sector who are registered early-childhood educators, the percentage change in the number of licensed child care spaces, and the percentage change in the time the Ministry takes to follow up on complaints and serious occurrences from the time they are initially reported.

However, we found that the measures do not address all aspects of the Ministry's vision. For example, the Ministry does not track how many children were placed on a waitlist (i.e., do not have access to child care). As well, although the Ministry established an indicator that measures the number of child care staff who received pedagogical training on the Ministry-developed resource guide entitled, *How Does Learning Happen?*, there are no measures to assess how effective this training was on the healthy physical, social, and emotional and cognitive development of children.

The Strategy indicated that the performance measures are to be reported annually on the Ministry's website, and although the Ministry had collected data on many of the measures, it reported publicly on only one: the percentage of children receiving subsidies by age group. At the time of our follow-up, the Ministry told us that the information was being reviewed by its legal and privacy teams to determine what information could be released publicly.

Licensing New Child Care Operators

Recommendation 2

To help ensure that new child care operators not only comply with legislation and ministry policy but also provide a safe and healthy environment that encourages the social, emotional and intellectual development of children, the Ministry of Education should:

- *develop guidelines to assist program advisors in assessing whether new applicants are sufficiently competent to establish child care operations;*
  Status: Little or no progress.

Details

At the time of our follow-up, the Ministry had not developed guidelines to help program advisors assess whether new applicants were sufficiently competent to establish child care operations. The Ministry told us that it planned to consult with other jurisdictions to collect information on how, or even if, they assess the competence of new applicants. The information would be used to determine how new operator competency should be assessed and when the assessments should take place.

- *thoroughly review new operators' policies to ensure that they comply with all Ministry and legislative requirements;*
  Status: Fully implemented.

Details

In our 2014 audit, we noted that operator policies were usually not kept on file at the Ministry, and were not available for management review. We also found that these policies were not always in compliance with Ministry and legislative requirements before the licence was issued.

At the time of our follow-up, all required policies (such as those for serious occurrences and criminal reference checks and supporting documents related to inspections) were now retained in the Child Care Licensing System. The Ministry told us that the licensing system has made it easier for regional managers at any time to review new operators' policies, on-site inspections summaries and other relevant supporting documents so that they can make an informed decision on whether to issue a new licence.

The Ministry informed us that if documents are missing or the applicant's policies do not meet the licensing requirements, the regional manager sends the application back to the program advisor, who follows up with the applicant to make the necessary corrections or obtain the appropriate supporting documents before the licence is issued.

In cases where one or more policies are not in compliance with licensing requirements, the applicant is required to submit a new policy or policies with the non-compliance issues corrected. All versions of the policies are retained in the system, including the final one.

- *provide new applicants with more detailed guidelines, templates and examples of best practices to assist them in developing the policies that they are required to have in place before receiving a licence and commencing operations;*
  Status: In the process of being implemented by the end of December 2017.

Details

In our 2014 audit, we reported that program advisors indicated that delays in issuing licences to new applicants were often due to the applicant's lack of knowledge about the legislation governing child care, and to insufficient available information for applicants on how to develop appropriate policies. We also noted in many subsequent licensing renewal inspections of existing operators, advisors consistently identified that operator policies, such as those for behaviour management, serious occurrences, medication administration and criminal reference checks, did not meet the requirements.

The Ministry released an updated licensing manual for child care centres in October 2015, and another for home child care providers in June 2016, to reflect the licensing requirements under the new legislation. The manuals identified items

for operators to consider when developing their policies and provided links to resources to help operators comply with the new legislative requirements. However, at the time of our follow-up, the Ministry had not developed sample policies and procedures it considered best practice, or templates that new applicants or existing child care operators could look to for guidance when developing their own policies and procedures. The Ministry told us it plans to develop sample policies to assist the licensees in meeting legislative requirements, which it expects to issue by the end of December 2017.

- *track the time it takes new applicants to become licensed, document the reasons for any delays and take appropriate action where necessary;*
  Status: Fully implemented.

Details

In our 2014 audit, we noted that it can take a new applicant anywhere from one to 18 months to obtain a licence to operate a child care facility in Ontario.

The Ministry began in December 2014 to electronically track the time it takes to issue new licences. It found that between October 2015 and December 2015, it took an average of 12 months to process a new licence application, with times ranging from 14 days to 21 months. This suggests that application-processing times have not improved since our 2014 audit.

The Child Care Licensing System can record important information such as the reasons for any delays in processing new applicants, but program advisors are not required to document the reasons. Instead, the Ministry's corporate office reviews quarterly reports of processing times for new applicants for each of its regional offices, and it told us these reports are shared with regional managers at periodic meetings. If any significant concerns are identified with the length of processing times, direction would be provided to regional mangers to investigate and determine if any further actions were needed.

The Ministry also noted that many factors can affect application processing times, including the size and type of the proposed program, whether the physical premises require construction or renovations, and the applicant's experience in operating a child care centre.

- *provide regional managers with sufficient evidence and documentation to support issuing licences to new child care operators; and*
  Status: Fully implemented.

Details

In our 2014 audit, we noted that operator policies were usually not kept on file at the Ministry and were unavailable for management review. We also found that these policies were not always in compliance before the licence was issued.

All the required polices and supporting documents, including those related to inspections, are now retained in the Child Care Licensing System, and managers can access them at any time. The system retains all versions of the policies submitted by the new operator, including the final version. In the past, if such documents were received electronically, they would reside on the program advisor's personal computer or a shared drive.

In addition, the licensing system provides fields where program advisors can document any notes or issues related to a file. Regional managers can view this information in the system when deciding whether to issue a licence to a new operator.

- *gauge the risk of non-compliance posed by each new operator, assess the length of time for which a new licence is issued based on this risk and monitor new operators accordingly.*
  Status: Fully implemented.

Details

In an effort to identify and correct non-compliance issues on a timelier basis, the Ministry began in August 2015 to require licensing staff to conduct mandatory unannounced inspections of new operators soon after they begin operating, where

geographically possible and while children are in their care. Based on a list of inspections conducted on new operators since August 2015, we noted that 53% of new operators had been inspected within three months of being licensed.

The Ministry also told us that its Enforcement Unit, established since our audit, reviews applicants' history of violations and identifies any past enforcement actions taken against them (e.g., a new applicant may have been charged as an unlicensed provider) to help regional managers decide whether to issue a new licence to new or existing operators. Together, these actions determine what type of licence to issue and for how long.

A draft directive on processing new licensing applications includes procedures to look at an applicant's history of violations for any information that might affect the decision to issue them a licence. The directive also contains procedures to assess an applicant's qualifications by verifying with applicable professional associations that the applicant is not prohibited from providing child care based on any past conduct. The Ministry expects to implement the directive following consultations with stakeholders.

Child Care Licence Renewals and Inspections

Recommendation 3

To ensure that child care operators are inspected in a timely manner to verify that they maintain compliance with legislative requirements and deliver services to children in a healthy, safe environment, the Ministry of Education should:

- *take more effective action against operators that do not submit their licence renewal forms on time and link inspection scheduling to licence expiry date rather than receipt of the licence renewal form;*

  Status: In the process of being implemented by the end of September 2017.

Details

Since the introduction of the Child Care Licensing System, notifications for the need to renew a licence are sent three months before expiry of the licence to both the operators and the respective program advisors. At the time of our follow-up, the Ministry had developed a draft directive on expired licences that provides guidance to licensing staff on suspending a licence in cases where an operator does not submit its application renewal form and fee on time. The Ministry expects to implement the directive in September 2017.

Unannounced licence renewal inspections for existing operators continue to be performed only after the operator has submitted a licence renewal form. The Ministry told us that it prefers to conduct inspections only if it knows the operator is committed to continue to deliver child care services. However, in addition to the licence renewal inspections conducted on child care centres, under the tiered (risk-based) licensing approach the Ministry began implementing at the end of August 2016 (described in the following recommended action), child care centres that have been operating at least three years and are categorized as Tier 1 or Tier 3 are expected to undergo an unannounced inspection within their licensing period as well as when they submit their renewal form.

- *identify high-risk operators and develop a risk-based approach for determining how often these and other child care operators should be inspected;*

  Status: Fully implemented for child care centres. Will not be implemented for home child care agencies. The Office of the Auditor General continues to support implementation of this recommendation for home child care agencies.

Details

On March 18, 2015, the Ministry approved implementation of a tiered (risk-based) approach for licensing child care centres. Under tiered licensing, the Ministry places each child care centre into one

of three tiers based on the operator's history of compliance with the Ministry's policies and legislative requirements over the last three years.

The Child Care Licensing System automatically generates a tier category for each child care centre based on the number and risk level of each centre's non-compliances, and on whether the centre has received a provisional licence or has had any enforcement action taken against it.

The tier category determines the term of the licence to be issued, how often the child care centre is to be inspected, and the level of monitoring to be conducted. For example, centres categorized as Tier 1 are issued a licence for a maximum of two years, and receive an abbreviated inspection that focuses on high-risk requirements at the time of licence renewal, and another, interim monitoring inspection some time during the licensing period.

Tier 2 centres are issued a licence for a maximum term of one year and, like Tier 1 centres, receive an abbreviated inspection at the time of licence renewal. However, these centres would only have an interim monitoring inspection if there was a serious occurrence or complaint that warranted a site visit during the licensing period.

Centres categorized as Tier 3 would also be issued a licence for a maximum term of one year and would undergo a full inspection ever year. They would also have at least one additional monitoring inspection during the licensing period to help them achieve and maintain compliance with licensing requirements.

Each centre's tier category would be re-calculated at the time their licence is to be renewed.

As of July 2016, a total of 4,239 child care centres were categorized into tiers as follows:

- 12% were in Tier 1;
- 78% in Tier 2; and
- 10% in Tier 3.

The Ministry had inspected 72 child care centres as of April 2016, and told us that the results of these inspections would be used to evaluate the abbreviated inspections performed on Tier 1 and 2 operators, and make any necessary modifications. The Ministry began inspecting all child care centres using the tiered licensing approach at the end of August 2016.

The Ministry is not implementing the tiered system for licensed home child care agencies. It inspects these agencies annually and relies on the agencies to inspect the home child care premises they oversee at least once every quarter, as required by legislation. We continue to believe that a risk-based approach to inspections should be implemented for home child care agencies, which care for about 29,300 children.

The Ministry is also not implementing the tiered system for child care centres that have been licensed for less than three years, in order to give them time to develop a history of performance. These types of operators continue to be licensed under the Ministry's existing system.

- *formulate a plan using this risk-based approach to address the backlog of inspections so that operators can be inspected before their licences expire; and*

  Status: Fully implemented.

Details

The Ministry has reduced the backlog of inspections from 32.2% at the time of our audit in 2014 to 13% as of March 31, 2016, through the following actions:

- In fall 2014, a dedicated Enforcement Unit was established that assumed full responsibility for all follow-ups in the unlicensed child care sector and for administering enforcement actions under the new Act. Previously, these responsibilities were carried out by program advisors. Licensing staff now work exclusively on licensed child care cases.
- Since July 2014, a combination of temporary and permanent have been hired to assist with the backlog of inspections and to continue to support child care licensing activities. In 2015, the Ministry also hired five senior program

advisors to oversee program advisors at the regional offices. Senior program advisors have been assisting with the backlog by pre-screening and approving licences for regional managers (so that applications can be processed faster) and by conducting inspections.

- A new senior manager position was created and filled on March 29, 2016. The senior manager's responsibilities include implementing strategies to manage program advisors' caseloads.
- Better information available from the Child Care Licensing System also helped the Ministry identify reasons for the backlog. For example, program advisors in one region were consistently setting licences to expire at the end of the month, but now are distributing expiry dates throughout the month so as to not face a difficult-to-manage workload at the end of the month.

In an effort to prevent backlogs from accumulating, the Ministry directed licensing staff in August 2015 to devote at least three days a week to renewal inspections, and provided guidance on timelines for completing licensing inspections. Program advisors were instructed to finalize renewal inspections within five business days of the compliance date set out in an inspection, and send the licence renewal recommendation to their manager.

- *schedule visits in a way that minimizes timing predictability.*
  Status: Fully implemented for child care centres. Will not be implemented for home child care agencies.

Details

Licence renewal inspections for existing operators continue to be performed only after the operator has submitted a licence renewal form because, the Ministry said, it prefers to conduct inspections only if it knows the operator will continue to deliver the service.

However, in addition to the licence renewal inspections of child care centres, the tiered licensing (risk-based) approach that the Ministry launched at the end of August 2016 also requires program advisors to perform unannounced inspections on Tier 1 and Tier 3 centres during their licensing period.

Tier 1 centres receive one unannounced inspection within at least two years, and Tier 3 centres receive one unannounced inspection within at least one year. Program advisors are expected to schedule these inspections in a way that reduces their predictability.

As noted earlier, tiered licensing will not be implemented for child care centres that have been operating for less than three years and for licensed home child care agencies.

Recommendation 4

To ensure that effective inspection procedures are in place to verify that child care operators maintain compliance with legislative requirements and deliver services to children in a healthy, safe environment, the Ministry of Education should:

- *enhance the procedural guidelines for inspections conducted by program advisors to include detailed minimum procedures to be performed;*
  Status: Fully implemented.

Details

In 2014 we found that the procedural guidelines for assessing compliance with licensing requirements were vague, so program advisors exercised a great deal of discretion when filling out the inspection checklist. For example, advisors were required to ensure that child care staff had the required health assessments and immunizations before commencing employment. However, one program advisor we spoke to at the time said that details of the requirements were not in the procedural guidelines or otherwise communicated to program advisors. The advisor also did not know which health assessments

and immunizations were required, or how often the vaccinations needed to be updated.

In 2015 the Ministry updated the child care centre inspection checklist used by program advisors to reflect the licensing requirements under the new legislation, and to incorporate compliance indicators that were previously not included. We noted that compliance indicators are still too general, and do not provide enough guidance to program advisors on how to consistently assess compliance with the new licensing requirements.

However, the Ministry had taken other steps to help program advisors better understand the procedures to be performed during an inspection. For example, program advisors can submit questions to corporate office which are then responded to and distributed to all licensing staff. Other initiatives, such as formal training on conducting inspections and an "inter-rater reliability" process (that is, having two Ministry staff conduct separate licensing inspections of the same child care operator to see if they reach the same conclusion), are discussed in the following recommended actions.

- *provide regular program advisor training and training updates on inspection guidelines;*
  Status: In the process of being implemented by February 2017.

Details

Since our audit in 2014, the Ministry's corporate office has provided formal training to program advisors on Ministry policies and legislative licensing requirements for child care programs.

In August 2015 and November 2015, the Ministry provided program advisors with training on assessing compliance with the licensing requirements of the *Child Care and Early Years Act* and its regulations. In January 2016, more training sessions were delivered that focused on assessing compliance with program statement requirements, enforcement, and the requirements for risk-based inspections.

The Ministry informed us a training strategy for new and existing program advisors and regional managers would be developed by February 2017.

- *have program advisors document the procedures performed and the conclusions they reach during inspections and retain all relevant documentation for subsequent management review; and*
  Status: Fully implemented.

Details

We noted in our 2014 audit that program advisors had a lot of discretion in their inspections of child care operators. We therefore recommended that they document how they determined that an operator had corrected its non-compliance issues and was now meeting licensing requirements.

Since our audit in 2014, the Ministry has upgraded the electronic inspection checklist used to document inspection results to allow program advisors to upload photographs and any other supporting documents from the operators' premises that demonstrate that the licensee has met compliance requirements, including a licensee's written confirmation that it had rectified any non-compliance issues identified.

After the on-site part of the inspection is completed, program advisors can also upload any additional supporting documents provided by the operator to show that they have complied with the licensing requirements.

All the supporting documents are to be retained in the system for management review.

- *periodically rotate program advisor caseloads to help compensate for inconsistencies in inspection practices.*
  Status: Fully implemented.

Details

In 2014 we reported that the Ministry did not have a policy requiring the periodic rotation of program advisors to ensure that different perspectives are

brought to the inspection process, and to help compensate for inconsistencies in inspection practices.

The Ministry told us that rotating program advisor caseloads can pose challenges. For example, it would be difficult to rotate advisors in some regions because of the distances involved, and the only solution could be to ask program advisors to relocate.

Instead of focusing on rotating caseloads, the Ministry implemented an "inter-rater reliability" process in fall 2015 that involves two Ministry staff conducting separate licensing inspections of the same child care operator independently of one another. Any discrepancies found in the compliance assessment ratings between the two inspectors are identified for review. A Ministry team from corporate office reviews the discrepancies with the two inspectors and determines the appropriate compliance assessment rating. The Ministry informed us that these results are shared with regional managers at branch meetings, who are then expected to review with their program advisors the scenarios which gave rise to the discrepancies in compliance assessment ratings.

At the time of our follow-up, the Ministry had completed three rounds of this "inter-rater reliability" exercise, and had shared the results of the first two rounds with licensing staff. The Ministry also told us it planned to undertake this exercise at least once a year.

Recommendation 5

To ensure that adequate policies and procedures are in place to enforce operators' compliance with legislative requirements and to help ensure that operators deliver services to children in a healthy, safe environment, the Ministry of Education should:

- *obtain appropriate supporting documentation to verify that any observed noncompliance is rectified and for management oversight purposes;*
  Status: Little or no progress.

Details

In our 2014 audit, for a sample of inspection files we reviewed, we found that in most cases the Ministry had accepted only a written confirmation from the licensee as evidence that they had rectified the non-compliance issues identified during the inspection.

At the time of our follow-up, the Ministry still had not developed guidelines to assist program advisors in determining how they should follow up on non-compliance issues to ensure that operators actually resolved concerns.

The Ministry issued a directive that requires program advisors to upload supporting documents (for example, emails, photos, and other documentation) in its licensing system, as confirmation that the licensee has rectified the non-compliances. However, it still did not provide direction on what type of supporting documentation would be warranted in certain situations or circumstances. For example, in certain cases a written confirmation from the licensee would be sufficient whereas in other cases other documents would be warranted.

Although the Ministry told us that its Internal Audit department plans to periodically review a sample of inspection files to verify that documentation requirements are being met across the province, the audit plans did not provide details on the nature and scope of any audit work to be performed in this area.

- *more closely monitor, as required, operators that have been issued a provisional licence;*
  Status: Fully implemented.

Details

Under the tiered (risk-based) licensing approach the Ministry implemented at the end of August 2016, child care centres that have been operating for at least three years and that have been issued a provisional licence—the Tier 3 operators—will be monitored more closely. Specifically, program advisors are required to conduct unannounced inspections of these operators soon

after renewing their licence, with a focus on critical and high-risk requirements. In addition, licensing staff determine whether additional inspections are required for these operators during the maximum one-year licensing period.

The Ministry also advised us that since our audit, program advisors have been using a number of approaches to more closely monitor licensees that have been issued a provisional licence. These approaches include requiring licensees to document actions that describes how and when they plan to come into compliance with the requirements, and requiring that they regularly submit documents such as logs or photographs to demonstrate that they have complied and continue to comply with the requirements.

- *develop or enhance guidelines related to issuing a short-term licence; extending a provisional licence beyond three months; meetings between regional managers and child care operators; and suspending, revoking or refusing to renew a licence;*

  Status: In the process of being implemented by the end of December 2016.

Details

In 2014, Ministry policy stated that provisional licences could be issued for up to three months, and could be extended only under exceptional circumstances. Our review of a sample of provisional licences at that time found that some operators were receiving licences that alternated between provisional and short-term. We were concerned that short-term rather than provisional licences were sometimes being given to avoid issuing consecutive provisional licences. Ministry policy at the time also stated that issuance of two consecutive three-month provisional licences for the same offence was sufficient time for the operator to comply before enforcement action was taken.

Under the new legislation, the Ministry clarified that a provisional licence can be issued for a maximum term of up to one year. If the licensee fails to remedy the non-compliance issues, the provisional licence may be renewed only once, provided the Ministry is satisfied that the licensee's failure to come into compliance was due to circumstances beyond their control. In addition, effective August 29, 2016, the Ministry discontinued the practice of issuing short-term licences.

At the time of our follow-up, the Ministry had also developed draft guidelines related to refusing to issue, renew or revoke a licence. The Ministry also told us it was working on developing guidelines for meetings between regional managers and child care operators on recurring non-compliance issues. The Ministry expects to release final guidelines for both by the end of December 2016.

- *disclose on its child care website all noncompliance issues noted during inspections in sufficient detail to give parents a sense of the risk posed to their children; and*

  Status: Fully implemented.

Details

In 2014, we reported that for 20% of the inspections we reviewed, not all non-compliance issues identified were reported on the Ministry's child care website, as required by policy. As well, we noted that the website provided only general statements regarding non-compliance issues, not the actual observed details. For example, in one instance the website notes that a centre did not meet the requirements of the local medical officer of health. However, no details were provided to give parents a sense of what that concern was or the risk posed to their children.

The Ministry still does not disclose actual observed details of non-compliance on its website. However, it has since the end of August 2016 posted the risk level of each non-compliance issue identified during an inspection, providing parents with a sense of the risk posed to their children.

Non-compliance issues are categorized as critical, high, moderate, or low, and are defined on the Ministry's website. An issue assessed as critical means there is a direct threat that could, or has,

resulted in serious harm to the health, safety, and well being of a child. An issue categorized as low means there is no likely threat to a child's health, safety and well-being.

Based on findings from 10 parent focus groups conducted by the Ministry, parents gave positive feedback about the inspection information provided on the Ministry's website. The website directs parents to the licensee for more information, or for a copy of the detailed licensing inspection report, if they have a concern about a non-compliance issue.

- *administer effective enforcement action against operators that have not complied with legislative and ministry requirements.*
  Status: In the process of being implemented by January 1, 2017.

Details

Since our audit in 2014, the Ministry has established an Enforcement Unit to enforce the new legislation (*Child Care and Early Years Act* and its regulations) and administer any enforcement measures against operators that do not comply with licensing requirements.

This legislation, which took effect on August 31, 2015, has also strengthened the Ministry's ability to administer enforcement measures against licensees that do not comply with licensing requirements. It includes more provisions that, if contravened, could result in a charge being laid against the operator. Examples of chargeable contraventions are operating multiple child care sites without a licence, preventing parental access to the child care premises, and employing an individual whose membership in the College of Early Childhood Educators was revoked. The legislation also includes additional enforcement measures. For example, it permits the Ministry to require operators to take a specified action, or refrain from an action, to achieve compliance with a licensing requirement.

Administrative penalties can also be applied to operators that fail to comply with any of 16 provisions under the Act. The regulation specifies the amount of the penalty that can be applied. For example, a $2,000 penalty can be imposed on operators that do not provide a criminal reference check to the Ministry.

Beginning January 1, 2017, another 10 provisions under the new legislation will take effect that, if contravened, could result in operators being fined. For example, the Ministry could impose a penalty of $2,000 for each child in excess of the staff-to-child ratios prescribed in the Act.

Recommendation 6

To ensure that adequate policies and procedures are in place to verify that private-home day care agencies comply with legislative requirements and deliver services to children in a healthy, safe environment, the Ministry of Education should:

- *develop more detailed inspection guidelines for program advisors;*
  Status: Fully implemented.

Details

In 2014 we accompanied program advisors during inspections of home day care providers, and found that they performed different procedures at different locations. We reported that standardized Ministry procedures would help ensure that all significant requirements were consistently reviewed.

In 2015 the Ministry updated the inspection checklist for home child care agencies and providers to reflect licensing requirements under the new legislation. In 2016 the checklist was further updated to incorporate compliance indicators that had previously not been included. We noted that compliance indicators are still too general, and do not provide enough guidance to program advisors on how to consistently assess compliance with the new licensing requirements.

However, the Ministry had taken other steps to help program advisors better understand the procedures to be performed during an inspection. For example, it had provided formal training on conducting inspections, and program advisors can

submit questions to corporate office, which are responded to and then distributed to all licensing staff.

- *ensure that the minimum number of homes are visited during agency inspections;*
  Status: Fully implemented.

Details

In our 2014 audit, we noted instances where program advisors had visited less than the 5% minimum of home daycare providers. Since our audit, the Ministry issued a directive with guidance to program advisors on the minimum number of homes to be visited for a home child care agency licensing renewal inspection (at least 10% of homes for agencies that oversee up to 200 home daycares, and at least 7% of homes for agencies that oversee 201 or more homes). For 90% of home child care agencies that underwent a renewal inspection since December 2015, program advisors inspected the minimum required number of home daycares. Also, the Ministry upgraded its licensing inspection software to prevent a program advisor from closing an inspection before ensuring that they had visited the required number of homes.

- *verify that the agencies' licensing inspection checklists are complete; and*
  Status: Fully implemented.

Details

We found in half of the files we reviewed in our 2014 audit that some questions in the agency inspection checklists were not answered.

Since our audit, the Ministry has updated its licensing inspection software to prevent program advisors from finalizing their inspection until all checklist questions are addressed.

The Ministry also issued a directive to program advisors and regional managers to ensure that the agency and home child care location licensing inspection checklists are complete, and that all applicable checklist questions are assessed and documented.

- *consider developing inspection checklists for agency staff.*
  Status: Fully implemented.

Details

Since our audit in 2014, the Ministry had developed an inspection checklist to be used by agency staff while performing inspections of home child care premises. This checklist was distributed to agencies for use at the end of August 2016.

Recommendation 7

To help ensure the delivery of a high-quality, accessible and co-ordinated child care system in Ontario that encourages child cognitive, language and social development, the Ministry of Education should:

- *re-evaluate the education requirement for program advisors on a go-forward basis to consider their education level and experience with child care operations;*
  Status: Little or no progress.

Details

During our 2014 audit, we noted that only half of the program advisors at the three regions we visited had a diploma in Early Childhood Education.

The Ministry told us it re-evaluated the education requirement for program advisors and was confident about its practices for assessing the education and experience of program advisors. As a result, it did not change these requirements since our audit. The Ministry did not document its evaluation, so there was nothing available for us to review. We continue to believe that it would be beneficial for program advisors to have a diploma in Early Childhood Education.

- *ensure that program advisors are provided with the necessary training and operational supports to effectively perform their job responsibilities; and*
  Status: In the process of being implemented by February 2017.

Details

With regards to training, as noted in Recommendation 4, the Ministry had delivered several formal training sessions to program advisors on program policies and legislative requirements, including assessing compliance with program statement requirements, enforcement, and requirements for risk-based inspections of operators. The Ministry expected to develop a training strategy for new and existing program advisors and regional managers by February 2017.

With respect to operational supports, as discussed in Recommendations 4 and 6, the Ministry introduced tools, such as:

- updated inspection checklists used by program advisors to conduct inspections on child care centres, and home child care agencies and their providers;
- a Q&A process whereby program advisors can submit questions to corporate office that are responded to and shared with all licensing staff; and
- the "inter-rater reliability" exercise.

In addition, the Ministry developed a tracking tool to help operators and program advisors verify and maintain compliance with the new legislative requirements for police record checks.

- *assess program advisor caseloads to ensure that sufficient time is available to conduct thorough inspections*

  Status: Fully implemented.

Details

Although the average program advisor caseload increased from 87 as of March 2014 to 101 as of June 2016, the Ministry has taken a number of steps since our audit in 2014 to ensure that program advisors have enough time to conduct inspections, including:

- establishment in fall 2014 of a dedicated Enforcement Unit that assumed full responsibility for follow-up in the unlicensed child care sector and for administering all enforcement actions under the new Act (previously the responsibilities of program advisors); and
- hiring of temporary and permanent staff since July 2014 to assist with program-advisor caseloads, and hiring of a new senior manager in March 2016 whose duties include implementing strategies to manage program advisor caseloads.

In addition, the Ministry told us that regional managers are now using several different approaches to effectively manage program advisor caseloads and further increase the time available for inspections, including:

- having staff prepare monthly work plans;
- instructing program advisors to set varying expiry dates on licences to reduce the number of renewals occurring at the same time; and
- encouraging program advisors to plan the length of their visit based on the risk posed by a licensee, so that a new licensee may get more time than an existing one with a good compliance history.

Regional managers are also able to generate reports from the Child Care Licensing System to help them manage caseloads. For example, a report that shows the status of each licence can be used by managers to see where delays are occurring in the process so they can consider strategies to keep renewal applications moving forward.

Criminal Reference Checks

Recommendation 8

To help ensure that child care operators provide a safe and healthy environment that encourages the social, emotional and intellectual development of children, the Ministry of Education should:

- *review its policy regarding criminal reference checks to assess whether it needs to be updated, who it explicitly applies to and the appropriateness of exemptions;*

  Status: Fully implemented.

Details

Since our audit in 2014, the Ministry has reviewed its policy regarding criminal reference checks, and strengthened the requirements.

The new legislation that took effect August 31, 2015, specifies which individuals must submit to a vulnerable sector check (previously, only a criminal reference check was required). Specifically, a person licensed to operate a child care centre is required to obtain a vulnerable sector check from every employee, volunteer and student regardless of whether they interact with children. The requirement applies to such individuals as cooks, drivers, and maintenance staff employed by the licensee. Home child care agencies must also obtain vulnerable sector checks from their employees, the home child care providers they oversee, every person who is ordinarily a resident of the private home and every person who is regularly on the premises.

In addition, the Ministry now requires that vulnerable sector checks be updated every five years. Also, every year between the vulnerable sector checks, individuals must submit an offence declaration that lists all criminal convictions.

In our 2014 report, we noted that applicants could be exempt from submitting a criminal reference check if they met all of the following criteria: the child care centre was incorporated and its board of directors did not have contact with children; the applicant already held a licence issued by the Ministry or operated another program in the community; and the applicant had an established record of providing service in the community. The Ministry has since eliminated these exemptions.

- *confirm that criminal reference checks have been obtained and are on file for all new operators and verify that board directors and other staff without checks do not have direct contact with children;*

  Status: In the process of being implemented by the end of December 2016.

Details

The Ministry told us that a new applicant would not be issued a licence until the required police record checks have been submitted to the Ministry and the program advisor has reviewed and approved the documents. Also, the checks are retained in the Child Care Licensing System and can, if needed, be accessed by regional managers for their review.

Under the new legislation implemented on August 31, 2015, the Ministry requires child care staff regardless of whether they have direct contact with children to submit a vulnerable sector check. In the case where a new applicant is a corporation, Ministry policy now requires all members of the board of directors of the corporation to submit either a vulnerable sector check if they have direct contact with children or a criminal reference check if they do not. At the time of our audit in 2014, only members of the board of directors who had direct contact with children were required to submit only a criminal reference check. At the time of our follow-up, the Ministry had also developed a draft directive on actions program advisors should take in cases where applicants have not submitted or completed the appropriate police record checks, which includes both a criminal reference check and a vulnerable sector check. The Ministry expects to implement this directive by December 2016.

- *require that all criminal reference checks for operators and child care staff be periodically updated; and*

  Status: Fully implemented for child care staff. Little or no progress for child care operators.

Details

As of August 31, 2015, the Ministry requires child care operators to obtain a vulnerable sector check from child care staff every five years, and an offence declaration in every calendar year except in a year where they have submitted a vulnerable sector check.

Child care operators are required to submit a criminal reference check or a vulnerable sector

check if they interact with children, when they apply for a new licence. The Ministry informed us that it would be requiring licensees to periodically update the criminal reference checks or the vulnerable sector checks; however, more work needed to be done on how that would be implemented.

- *require vulnerable sector checks in addition to regular criminal reference checks.*
  Status: Fully implemented.

Details

As of August 31, 2015, the Ministry requires child care operators to obtain a vulnerable sector check from child care staff. Also, child care operators that interact with children are now required to submit a vulnerable sector check to the Ministry.

Serious Occurrences

Recommendation 9

To help reduce the risk to the health and safety of children at child care facilities and to appropriately address, report and analyze serious incidents, the Ministry of Education should:

- *develop guidelines for investigating and following up on serious occurrences;*
  Status: Fully implemented.

Details

In March 2015 the Ministry upgraded the Child Care Licensing System to include fields that program advisors must fill in to document the actions they took to follow up on serious occurrences.

Program advisors are now required to document the method used to follow up on the serious occurrence (e.g., site-visit, email, or phone call), the date they conducted the follow-up, the name and position of the person they spoke with, and any additional details relevant to the follow-up.

In addition, in October 2016 the Ministry issued a directive on serious occurrences that contains guidelines for investigating and following up on such occurrences.

- *develop procedures for verifying that child care staff are aware of serious occurrence policies, including how to identify, respond to, document and report serious occurrences;*
  Status: Fully implemented.

Details

In 2014 we identified a number of incidents that did not meet the legislative and Ministry definition of a serious occurrence, but were reported as such to the Ministry (e.g., a child who suffered minor injuries). We identified other incidents that did qualify as serious occurrences but that were not reported to the Ministry.

The newly issued directive on serious occurrences includes guidance on what constitutes a reportable serious occurrence and what does not.

Beginning August 29, 2016, the new legislation requires child care operators to annually review their serious-occurrence policies with all staff and any other appropriate individuals (such as volunteers, home child care providers, and residents of a home daycare). These individuals are also required to sign a document indicating the date they reviewed the policy and with whom. In August 2016, the Ministry revised its inspection checklists to require program advisors to review these records.

- *take more effective action against operators that do not comply with legislated reporting requirements, including those that do not properly report serious occurrences;*
  Status: In the process of being implemented by January 1, 2017.

Details

Beginning on January 1, 2017, the new legislation allows the Ministry to impose a new administrative penalty of $2,000 on licensees that do not report serious occurrences to the Ministry within the required 24 hours.

- *consider developing protocols with other investigative authorities to share information;*
  Status: Fully implemented.

Details

On February 17, 2015, the Ministry signed an information-sharing protocol with the Ministry of Children and Youth Services, which oversees the province's Children's Aid Societies. It also signed a protocol in January 2015 with the Public Health Division of the Ministry of Health and Long-Term Care, and in August 2016 with the Office of the Chief Coroner and the Frontenac, Lennox and Addington Children's Aid Society. In addition, the Ministry had also drafted information sharing protocols with the Ontario Provincial Police and the Peel Region Children's Aid Society.

- *analyze serious occurrences by operator to identify any potential operator or systemic concerns; and*

  Status: Fully implemented.

Details

As of December 2014, the Ministry was able to generate reports that provide detailed information, as well as high-level summaries, on all serious occurrences in the province. Program advisors can generate reports that detail all serious occurrences by type for each child care operator in their caseload.

In addition, the Ministry's corporate office prepares summary reports of serious occurrences that are shared periodically with regional managers to identify any systemic concerns that need to be further investigated.

The newly issued directive on serious occurrences also includes direction to licensing staff on expectations for reviewing serious occurrences.

- *consider posting serious occurrences online where parents can readily access them.*

  Status: Will not be implemented.

Details

The Ministry decided it would not implement this recommendation. It told us that the posting of serious occurrences online would require in-depth consultations with its stakeholders and legal counsel, and may not provide good information to parents because it does not include follow-up information. It also told us that it may create a disincentive for operators to report serious occurrences. We continue to believe that serious occurrences should be posted online because a parent has the right to know this information when making their child care choice.

Complaints

Recommendation 10

To ensure that complaints are adequately investigated and to help identify concerns that may not be readily apparent during inspections, the Ministry of Education should:

- *perform timely management review of reported complaints and the results of investigations;*

  Status: Fully implemented.

Details

Since our audit, the Ministry has started tracking the time it takes to process complaints. It told us that in cases where complaint-resolution times were identified as a concern, regional managers were instructed to investigate and take appropriate action to ensure more timely review of complaints.

For the period between October 2015 and December 2015, the average time to process a complaint was 21.5 days, from the date the complaint was received until the date an investigation was completed, including the required review by the regional manager.

Although we have no exact comparative data from our last audit, we did test a sample of complaints in 2014 and noted that it took an average of 150 days from the time an investigation was completed until the time regional managers reviewed it.

- *confirm with complainants that their concerns have been investigated; and*

  Status: Fully implemented.

Details

Starting December 2014, where a complainant provides their email address, the Child Care Licensing System automatically notifies the complainant that their complaint has been received. Once the program advisor has followed up on the complaint and closed it, the complainant receives a system-generated email notifying them that the Ministry followed up on their concerns, along with a high-level summary of the outcome of the program advisor's investigation. In situations where the complainant provides a phone number, but no email address, the program advisor is expected to call the complainant to notify them of the results of the investigation, and document the telephone call in the licensing system.

- *regularly review and analyze the nature of complaints received and use this information to develop procedures such as conducting surprise site visits to child care operations to help mitigate the risks identified.*

  Status: In the process of being implemented by the end of December 2016.

Details

In December 2014, the Ministry started capturing information on the number and nature of complaints, such as those related to the abuse or neglect of children and the buildings and accommodations at child care premises for each region.

The Ministry's corporate office prepares summary reports on complaints, including the number and nature of those complaints, which are shared with regional managers to identify areas that may warrant further investigation and follow-up.

The Ministry's review of complaints data identified that two of the more serious categories of complaints related to allegations of abuse and supervision of children. In response to the trends in complaints, the Ministry informed us that licensing staff were following up with a local Children's Aid Society on allegations of abuse.

At another region where supervision of children was identified as a concern, the Ministry told us the regional manager reviewed the relevant section from the licensing manual for child care centres at a stakeholder and community meeting to raise awareness of the requirements for supervision of children.

The Ministry has also drafted a directive that guides licensing staff on how to review complaints on licensed child care facilities that it expects to issue by the end of December 2016.

Chapter 1
Section
1.03

The Financial Services Commission of Ontario—Pension Plan and Financial Service Regulatory Oversight

Follow-Up on VFM Section 3.03, *2014 Annual Report*

RECOMMENDATION STATUS OVERVIEW					
	# of	Status of Actions Recommended			
	Actions Recommended	Fully Implemented	In Process of Being Implemented	Little or No Progress	Will Not Be Implemented
Recommendation 1	2	1		1	
Recommendation 2	2	2			
Recommendation 3	6	4	2		
Recommendation 4	5	3	1	1	
Recommendation 5	4	1	1	1	1
Recommendation 6	5	2		3	
Recommendation 7	3			3	
Recommendation 8	5	4		1	
Recommendation 9	1			1	
Total	**33**	**17**	**4**	**11**	**1**
%	**100**	**52**	**12**	**33**	**3**

Background

The Financial Services Commission of Ontario (FSCO) is an agency accountable to the Ministry of Finance (Ministry) and responsible in Ontario for regulating pension plans; the insurance industry; the mortgage brokerage industry; credit unions and caisses populaires; loan and trust companies; and co-operative corporations (known as co-ops). FSCO's mandate is to protect the public interest and enhance public confidence in Ontario's regulated financial sectors through registration, licensing, monitoring and enforcement.

The Pension Division of FSCO administers and enforces the *Pension Benefits Act* (Act) and its regulations. Under the Act, every employer that establishes a pension plan in Ontario must register it with FSCO and comply with the reporting and fiduciary responsibilities set out in the Act. The Licensing and Market Conduct Division of FSCO administers and enforces the requirements of legislation pertaining to the financial service sector.

Underfunded pension plans are those that would not have enough funds to pay full pensions to their members if they were wound up immediately.

In our *2014 Annual Report*, we noted that the level of underfunding in defined-benefit pension plans in Ontario had become significantly worse during the previous decade. As of December 31, 2013, 92% of Ontario's defined-benefit plans were underfunded, compared to 74% as of December 31, 2005. The total amount of underfunding of these plans grew from $22 billion in December 2005 to $75 billion in December 2013.

However, during our follow-up, we found that the overall financial health of plans has improved from the time of our 2014 audit, with 83% of plans being underfunded as of December 31, 2015, down from the 92% in 2013. Similarly, the total underfunding of plans decreased from $75 billion in 2013 to $63 billion in 2015.

FSCO had limited powers to deal with administrators of severely underfunded pension plans, or those who do not administer plans in compliance with the Act. In contrast, FSCO's federal counterpart, the Office of the Superintendent of Financial Institutions (OSFI) had legal authority to terminate a plan, appoint a plan administrator, or act as an administrator, but FSCO could only prosecute an administrator (which is usually the employer company), issue compliance orders or take action after it orders the wind-up of a plan. As well, it could not impose fines on those who failed to file information returns on time.

In our 2014 report, we concluded that FSCO should make better use of the powers it already had under the Act to monitor pension plans, especially those that were underfunded. Regarding the oversight of pensions, other significant issues included the following:

- In the four years prior to our 2014 audit, FSCO had conducted on-site examinations of only 11% of underfunded plans on its solvency watch list. At this rate, it would take 14 years to examine them all. As well, FSCO took little or no action against late filers of information.
- It was uncertain whether the Pension Benefits Guarantee Fund (PBGF), designed to protect members and beneficiaries of single-employer defined-benefit plans in the event of employer insolvency, was itself sustainable.

With respect to the Licensing and Market Conduct Division's (Division's) oversight of regulated financial services, we had the following significant issues:

- FSCO undertook minimal oversight of co-ops, which raise millions of dollars from investors each year for ventures such as renewable energy initiatives. FSCO did no criminal background checks of key members before a co-op was registered and began raising money.
- Weakness in FSCO's online licensing system allowed life insurance agents to hold active licences without having entered proper information about whether they had up-to-date errors and omissions insurance to cover client losses arising from negligence or fraud by an agent.
- There were significant delays and weak follow-up enforcement actions in the Division's handling of several serious complaints.

In our 2014 audit, we recommended that FSCO conduct an analysis of the specific reasons for the increase in underfunded pension plans and the financial exposure to the province; assess the Pension Benefits Guarantee Fund's financial risk exposure to potential claims and to its continuation; ensure that its online licensing system has the necessary controls to identify and reject licences for insurance agents who do not meet minimum requirements; investigate complaints in a timely manner; and explore opportunities to transfer more self-governing responsibilities to financial services sectors.

We received commitments from the commission that it would take action to address our recommendations.

Standing Committee on Public Accounts

In March 2015, the Standing Committee on Public Accounts (Committee) held a public hearing on

our 2014 FSCO Pension Plan and Financial Service Regulatory Oversight audit. In June 2015, the Committee tabled a report in the Legislature resulting from this hearing. The Committee endorsed our findings and recommendations. The Committee made 14 additional recommendations and asked FSCO to report back by the end of September 2015. The Committee's recommendations and follow-up on their recommendations are found in Chapter 3, **Section 3.03** of Volume 2 of our *Annual Report*.

Agency Mandate Review

In early 2015, an expert panel was appointed by the Minister of Finance to review the mandates of FSCO, the Financial Services Tribunal (FST), and the Deposit Insurance Corporation of Ontario (DICO). The panel was charged with determining whether:

- each agency's mandate aligned with the province's goals and priorities;
- each agency was fulfilling its mandate;
- the functions of each agency could be better performed by another entity; and
- changes to the current governance structure were necessary to improve accountability and mandate alignment.

The panel released a consultation paper in April 2015, to which FSCO responded in June 2015. The panel released its preliminary position paper in November 2015, and presented its final recommendations to the Minister of Finance on March 31, 2016. The Ministry informed us that decisions based on these recommendations are expected in fall 2016. The panel made 44 recommendations, with the overall position that many functions performed by FSCO and DICO could be better performed by a single new and integrated entity—the Financial Services Regulatory Authority or FSRA. We reviewed the panel's final report, and noted that its findings and recommendations reflected our assessment of FSCO's functions in 2014. Specifically, the panel noted that the FSRA, if created, would need to:

- be more proactive in conducting investigations and taking enforcement action;
- have an obligation to work with other regulators to share information about disciplinary and enforcement action to eliminate regulatory overlap and gaps;
- have the authority to levy administrative monetary penalties in any sector it regulates; and
- structure co-operative offering statement review fees in a manner that reflects its review costs.

Status of Actions Taken on Recommendations

FSCO provided us with information in the spring and summer of 2016 on the status of our recommendations. According to this information, 17 of 33 actions we recommended in our *2014 Annual Report* had been fully implemented.

With respect to pensions, these are:

- analyzing the reasons for the increase in the underfunding of defined-benefit pension plans
- assessing the Pension Benefits Guarantee Fund's (PBGF) financial risk exposure to potential claims and its continuation as an insurer of single-employer defined-benefit pension plans, and it using this information to recommend further possible changes to the *Pensions Benefits Act* and regulations to address the sustainability of the PBGF;
- seeking changes to the *Pension Benefits Act* to provide FSCO with powers similar to those of the federal Office of the Superintendent of Financial Institutions, including powers to terminate, appoint and act as a plan's administrator;
- establishing a staged approach for earlier monitoring and supervision of pension plans that have solvency deficiencies;

- introducing a program that regularly assesses the reasonableness of assumptions used in actuarial valuation reports;
- taking more proactive follow-up action against plan administrators that do not submit statutory filings on time;
- ensuring that its procedures for examining plans effectively address the risks associated with investments managed by plan administrators;
- ensuring it has the necessary information to identify plans at risk before employers launch bankruptcy proceedings;
- establishing an examination program for defined-contribution plans that provides effective monitoring and protection to plan members; and
- identifying and seeking to implement improvements to statutory annual disclosure requirements of a plan administrator that would provide more meaningful information to all members on the plan's performance and expenses.

With regard to financial services, FSCO has fully implemented our recommendations that:

- all approved co-ops offering statements are listed on its website; and
- it consult with the Ontario Securities Commission on the benefits of sharing or transferring the responsibility of reviewing offering statements.

With respect to market conduct, FSCO has fully implemented our recommendations that it:

- take timely action to investigate complaints, and have adequate systems and procedures in place to monitor the timelines and outcomes of its handling of complaints and investigations;
- identify common issues from its examination activities and share them with the industry, and consider action that can be taken to mitigate their causes; and
- establish systems and procedures to promptly identify, investigate and determine the continued suitability of registrants and licensees who have received sanctions from other associations.

FSCO had also made progress on four of the remaining actions we recommended. However, significant work is still needed to address our recommendations in areas that require legislative changes, including criminal background checks for co-op board members before the co-op is registered. Such policy decisions rest with the Ministry.

Each quarter, the Ontario Internal Audit Division (OIAD) reviews the status of our audit recommendations to monitor progress made by FSCO and assesses whether management's action plans can substantiate the status of implementation. Based on its latest review in August 2016, OIAD concluded overall that FSCO had made progress in implementing our recommendations. We reviewed the OIAD's report, and this is in line with our assessment of FSCO's progress to date.

The status of the actions taken on each recommendation is described in the following sections.

Pensions

Recommendation 1

In view of the significant increasing underfunding of defined-benefit pension plans in Ontario, the Financial Services Commission of Ontario should conduct an analysis of the reasons for this increase, the potential for plans to recover based on a variety of predictions of economic growth in the province over the next several years, and the financial exposure to the province should the underfunding situation not improve in the next few years.

Status: Fully implemented.

Details

In our 2014 audit, we found that as of December 13, 2013, 92% of defined-benefit pension plans were underfunded, with plan liabilities exceeding assets by $75 billion. This was a significant increase from December 31, 2005 when 74% of plans were underfunded, with a total deficit of $22 billion.

Due to the economic downturn in 2008, all types of defined-benefit plans saw an increase in their underfunding.

Since our audit in 2014, FSCO analyzed changes in the funded status of plans from 1992 to 2014 and the primary factors driving the change. The analysis showed that the primary factors affecting the change were long-term interest rates, investment returns and special payments to amortize funding deficiencies.

FSCO told us it had intended to calculate projected underfunding over the following few years, based on a range of economic growth scenarios. FSCO reviewed the province's GDP from 2005 to 2015 and found there was no correlation between the funded status of pension plans and economic growth.

It should use this information to identify and recommend strategies and changes to the legislation that could help to inform and mitigate the financial risk to sponsors and members of pension plans, as well as to legislators and taxpayers.

Status: Little or no progress.

Details

Since our 2014 audit, FSCO has not developed strategies or considered changes to legislation that would mitigate the financial risk to plan sponsors and members of underfunded plans. In July 2016, the Ministry issued a consultation paper about the solvency funding framework for defined-benefit pension plans, including how solvency is assessed and the minimum solvency funding requirements needed to balance the needs of plan sponsors, member, and retired employees. FSCO has told us that it will provide to the Ministry its analysis of the factors contributing to the underfunding of pension plans. Once the Ministry receives feedback to the consultation paper from stakeholders, it plans to draft the necessary legislative and regulatory amendments. FSCO is currently awaiting further information from the Ministry.

Recommendation 2

The Financial Services Commission of Ontario should assess the Pension Benefits Guarantee Fund's (PBGF) financial risk exposure to potential claims and its continuation as an insurer of single-employer defined-benefit pension plans, and it should use this information to recommend further possible changes to the Pensions Benefits Act *and regulations to address the sustainability of the PBGF.*

Status of both actions: Fully implemented.

Details

In our 2014 audit, we reported that the PBGF was intended to be self-sustaining through annual assessment fees it charged to certain defined-benefit pension plans. However, our audit found that the PBGF's financial risk exposure had increased significantly from 2008 to 2014. In 2008, the PBGF was exposed to the cumulative solvency deficiencies of the 2,258 pension plans it covered, which amounted to $6.6 billion at that time. By March 31, 2014, these cumulative deficiencies had grown by more than 400% to $28.9 billion, even though the PBGF covered only 1,894 plans, 19% fewer than in 2008.

Since our audit in 2014, FSCO's analysis of PBGF's financial risk exposure has shown there is one potentially significant claim on PBGF's funds. Although FSCO does not foresee any significant claims in the fiscal year ending March 31, 2017, it has projected that there is some likelihood of a significant claim in the fiscal years ending March 31, 2018 and 2019. Other than the one potentially significant claim, FSCO considers the overall liquidity risk to the PBGF for this time period to be low and will be using its analysis to consider how it can mitigate the PBGF's exposure to potential claims. It shared its analysis with the Ministry in August 2016, and the Ministry told us that it is reviewing these results while it considers revising the funding framework for defined-benefit plans in Ontario.

In our 2014 audit, we found that the PBGF's liability for paying claims of insolvent pension plans

was limited to the amount of the fund's own assets. As a result, since 1980, the PBGF had required loans and grants from the province totalling $855 million to cover all eligible claims. As of March 31, 2014, the PBGF had loans payable to the province of $220 million. Meanwhile, as of August 31, 2014, there were 15 employers with pension plans covered by the fund whose solvency deficiencies each exceeded $200 million. Several studies since 2008 have questioned the PBGF's viability and recommended that the government assess its continuation.

Since our audit, FSCO has analyzed the legislative and procedural changes required to monitor the PBGF's exposure to potential claims and address its sustainability. In August 2016, FSCO shared with the Ministry a report with several possible enhancements to legislation, including allowing the PBGF to seek external financing to meet short-term cash-flow needs, requiring parent companies of insolvent plan sponsors to provide those sponsors with financial support, and allowing the Superintendent greater discretion to order the wind-up of insolvent plans that could potentially file significant claims against the PBGF. The Ministry told us it is reviewing FSCO's proposed enhancements to legislation together with recommendations from the mandate review. The Ministry expects to make its final decisions about FSCO's mandate and possible changes to legislation in the fall of 2016.

Recommendation 3

To ensure the Superintendent has sufficient powers, authority and information to effectively monitor the administration and solvency of pension plans, the Financial Services Commission of Ontario should make changes to its policies and procedures, and, where necessary, seek changes to the Pension Benefits Act, *to:*

- *provide it with similar powers to that of the federal Office of the Superintendent of Financial Institutions, including powers to terminate, appoint and act as a plan's administrator;*
  Status: Fully implemented.

Details

In our 2014 audit we found that, for plans that were severely underfunded or not being administered in accordance with the *Pension Benefits Act*, the Superintendent could not take disciplinary action aside from prosecuting plan administrators, issuing compliance orders or ordering the wind-up of a plan. Even when an administrator was not meeting its obligations, the Superintendent could not appoint a new administrator, except for plans that were being wound up. On the other hand, the federal Office of the Superintendent of Financial Institutions (OSFI) had powers to remove a plan administrator and appoint a replacement for plans where there was an immediate threat to members' benefits.

After talks with FSCO, the Ministry posted a description in September 2016 of proposed changes to regulations in the *Pension Benefits Act* that would grant the Superintendent the power to act as or appoint an administrator. This included a proposal to expand the powers of the Superintendent to appoint a plan administrator where the employer is in receivership, or the subject of proceedings under the *Companies' Creditors Arrangement Act* or the *Bankruptcy and Insolvency Act*. Any changes to legislation will be made by the Ministry once the agency mandate review is complete. The Ministry informed us that this should occur in the fall of 2016.

- *establish a staged approach for earlier monitoring and supervision of pension plans that have solvency deficiencies;*
  Status: Fully implemented.

Details

In our 2014 audit, we noted that unlike FSCO, the OSFI had a five-stage rating system that determined the type of intervention required for pension plans at risk of insolvency to minimize the risk to members.

In June 2016, FSCO finished implementing a staged approach for monitoring and supervising all pension plans. A risk score assigned to each plan determines the level of intervention by FSCO to address issues, including solvency. FSCO bases the risk score on information about each plan's risk in its funding, investment, administration, governance, sponsor and industry. This allows FSCO to identify high-risk plans and intervene earlier. FSCO has identified 29 high-risk plans, 14 of which have since become compliant with regulations; the remaining 15 are still under review.

- *increase the Superintendent's power to order a plan administrator to provide an actuarial valuation report, particularly when a plan has a solvency deficiency, and introduce a program that regularly assesses the reasonableness of assumptions used in these reports; and*

  Status: First part of the recommendation—in the process of being implemented by December 31, 2016; second part of the recommendation—fully implemented.

Details

In our 2014 audit, we reported that under the *Pensions Benefits Act*, plan administrators of defined-benefit plans must file actuarial valuation reports every three years if their plan does not have a solvency concern, such as when the solvency ratio is 0.85 or higher, or annually if the solvency ratio is lower. FSCO does not have the power to order an interim actuarial valuation of a pension plan. Federal pension legislation requires more frequent filing of actuarial valuation reports. This allows for more accurate and timely reporting on the funding status of pension plans.

At the time of our 2014 audit, amendments to the *Pension Benefits Act* to provide the Superintendent with the powers to order plan administrators to file revised or additional actuarial valuation reports had yet to be proclaimed into force by the government. During our follow-up, the Ministry told us that it was actively considering developing regulations that would allow these changes to be enacted. These regulations are being considered together with recommendations from the mandate review. The Ministry expects to complete this work in the fall of 2016.

In our 2014 audit, we also found that in the previous five years, FSCO received approximately 1,700 actuarial valuation reports annually. However, since the fall of 2011, FSCO had carried out detailed reviews of only a small number of actuarial reports each year on a sample basis. FSCO does not externally report the results of these reviews. However, as of June 2016, FSCO includes the review of a pension plan's actuarial valuation report in its staged monitoring of pension plans, and since then it has reviewed 28 reports.

FSCO told us it reviews actuarial assumptions for plans it considers to be at risk and when it prepares and publishes its annual defined-benefit pension plan funding report. Through its online information return intake process, FSCO also continues to assess whether actuarial assumptions used by pension plans fall within pre-set parameters. It was assessing the appropriateness of these parameters and revising them as needed.

- *take more proactive follow-up action against plan administrators that do not submit statutory filings on time, and acquire powers to impose penalties for late filing.*

  Status: First part of the recommendation—fully implemented; second part of the recommendation—in the process of being implemented by December 31, 2016.

Details

In our 2014 audit we found that, as of May 2014, there were more than 1,300 plan administrators who had one or more statutory filings that were more than one year past due. FSCO had taken action against only 176 of these plans by sending a letter to the administrator.

In early 2015, FSCO started to monitor weekly whether filings were submitted on time, and it also

improved its follow-up process for plan administrators who did not submit statutory filings on time. FSCO now sends a second reminder letter and it attempts to call those administrators who do not respond within 45 days to its first warning letter. If the administrator does not submit required statutory filings after two call attempts, FSCO takes a risk-based approach to identify and correspond with pension plan administrators in a final attempt to get them to comply. If it still cannot get compliance, FSCO initiates legal action against the administrator under the *Provincial Offences Act*.

In our 2014 audit, we also reported that FSCO had the power to impose administrative monetary penalties in the mortgage and insurance sectors, but it did not have the power to do so in the pension sector, despite the fact that it recommended the required legislative changes to the Ministry in 2010.

In June 2015, FSCO submitted a report to the Ministry that proposed using penalties as a regulatory tool in cases of late filings and other contraventions of the *Pension Benefits Act*. The report also contained the legislative changes that would be required to impose these penalties. This report proposed fixed penalties for violations such as late or missing filings and variable penalties for all other offences. The Ministry told us it was considering FSCO's report in conjunction with the results of the agency mandate review, which recommended that the authority to levy penalties should be transferred to the Financial Services Regulatory Authority. The Ministry expects to make decisions based on recommendations from the agency mandate in the fall of 2016.

Recommendation 4

To ensure examinations of pension plans conducted by the Financial Services Commission of Ontario (FSCO) provide an effective level of assurance that plan administrators are operating in accordance with statutory requirements, FSCO should:

- *conduct more plan examinations and select plans for examination based on risks to members of the plan;*
  Status: In the process of being implemented by March 31, 2017.

Details

In our 2014 audit, we found that FSCO conducted 50 pension plan examinations annually in each of the previous three fiscal years. At that rate, we calculated it would take FSCO well over 100 years to examine the more than 7,300 plans it regulates, and about 14 years if it limited its examinations to plans on its solvency watch list.

At the time of our follow-up, FSCO had made some progress on our recommendation. In 2015/16 FSCO examined 55 plans and in 2016/17 it planned to examine more than 55 plans. In our 2014 audit, we found that plans selected for examination were chosen mainly because they had a record of investment concerns or late filings. FSCO now includes the results of its staged monitoring process for pension plans in deciding which plans to examine. In September 2015, FSCO retained a vendor to provide monthly data about the potential inability of plan sponsors to meet pension obligations. FSCO told us it was assessing how this information could be factored into selecting plans for examination.

- *ensure that its procedures for examining plans effectively address the risks associated with investments managed by plan administrators;*
  Status: Fully implemented.

Details

Our 2014 audit found that plan administrators provided only a summary of their plans' investments to FSCO, rather than a detailed listing. Financial statements filed by administrators similarly provided only partial information. Without more detailed information, FSCO would be unable to verify that plans were in compliance with investment regulations unless it conducted on-site examinations. Even when it did conduct these examinations, FSCO's reviews were focused on plan policies, and

it did not sample individual investments to check for compliance with federal laws.

After our audit, FSCO expanded its examination procedures for defined-benefit plans and defined-contribution plans. The expanded procedures include verifying that a plan's expenses are reasonable given its total size, permitted asset classes in which members can invest are clearly established, and which default investment options exist for members if they do not choose their own investments. These additional procedures allow FSCO to check whether plan assets have been invested in accordance with federal investment regulations and that plan members have appropriate information about the risks associated with their investments. The expanded procedures were used by FSCO to examine 55 plans in 2015/16.

- *provide guidelines to auditors of pension plan financial statements that set out minimum expectations for ensuring compliance with key requirements of the* Pension Benefits Act *as part of these audits;*
  Status: Little or no progress.

Details

In 2014, we found that FSCO did not provide guidance to auditors of pension plan financial statements so that they could ensure that plan administrators were complying with key requirements of the *Pension Benefits Act*. This would include verifying whether plan administrators exercised due diligence in the administration of pension plans, were paid reasonable fees, and that plan assets were invested as per federal investment rules. We noted that with auditors performing this work, FSCO would be able to allocate its limited resources to examining other risk areas of pension plans.

FSCO has made little progress in response to our recommendation. During our follow-up, it said it did not anticipate providing any additional guidelines to auditors until 2017 at the earliest.

- *ensure it has the necessary employer information to identify plans at risk before employers launch bankruptcy proceedings; and*
  Status: Fully implemented.

Details

Our 2014 audit found that the majority of FSCO-ordered pension plans wind-ups occurred because the employer went bankrupt. To identify employers who were facing financial difficulties, FSCO would need access to employer records and financial statements. However, under the *Pension Benefits Act*, FSCO had limited authority to access these records.

In October 2015, FSCO hired a vendor to gather information about plan sponsors' solvency risk. During our follow-up, FSCO said it was assessing how best to use information provided by the vendor as a reliable predictor of a plan sponsor's potential insolvency and how it could be factored into the process of selecting plans for examinations. FSCO also told us it did not have authority under the *Pension Benefits Act* to require employers to file financial statements.

- *establish an examination program for defined-contribution plans that provides effective monitoring and protection to plan members.*
  Status: Fully implemented.

Details

In our 2014 audit, we found that FSCO did very little to monitor whether defined-contribution pension plans were administered in accordance with the requirements of the *Pension Benefits Act* and the interests of plan members. We also noted that during the 14 examinations of defined-contribution plans that FSCO conducted over the previous three fiscal years, it did not assess the investments in detail or whether the plan invested assets in accordance with options selected by members.

Since our audit, FSCO has expanded its examination procedures for defined-contribution plans. In 2015/16, FSCO examined 15 defined-contribution plans. Three of these had service providers who administered the operations of the plans, and FSCO

verified that member contributions were invested as per members' selections, and that fees and expenses charged were appropriate and disclosed to members. In the other 12 plans, FSCO found deficiencies such as outdated policies and procedures and inadequate member benefit statements. FSCO told us that findings like these are common and recurring, and it would therefore examine 16 defined-contribution plans in 2016/17.

Recommendation 5

To ensure that pension plan members get more detailed disclosures about their pensions, and about the regulatory oversight performance of the Financial Services Commission of Ontario (FSCO), FSCO should:

- *identify and seek to implement improvements to statutory annual disclosure requirements of a plan administrator that would provide more meaningful information to all members on the plan's performance and expenses, and how their plan performed compared to other similar plans and relevant benchmarks; and*

  Status: First part of the recommendation—fully implemented; second part of the recommendation—little or no progress.

Details

In June 2016, FSCO completed a review of statutory annual disclosure requirements in other provinces and territories, such as the United States and the United Kingdom. It then prepared a report that recommended possible enhancements to current requirements, which it shared with the Ministry in October 2016. Additional disclosures recommended in the report include names and contact information of plan administrators and the earliest date a plan member is eligible to retire. Given the complexity of plan expenses and how they impact members, the report recommends that a public consultation be held to develop standardized reporting methods.

FSCO told us it would likely be impractical for it to recommend that plan administrators be required to assess their plan's performance against others because information about performance results and the underlying investment policies and strategies that would make the comparison meaningful are not required to be made publicly available; nevertheless, some plan administrators do assess their plan's performance against other plans when those plans do publish their performance results.

- *reassess its annual public reporting on pension plans in Ontario to provide more useful information for assessing how FSCO protects members' pension interests and how well their plan performed and was administered in comparison to other plans.*

  Status: First part of the recommendation—in the process of being implemented by March 31, 2017; second part of the recommendation—will not be implemented. The Office of the Auditor General continues to believe that individual plan comparisons are important for plan members to see how their plan compares to others.

Details

In our 2014 audit, we found that although FSCO published annual data about the size and number of pension plans in Ontario, as well as the overall solvency position of defined-benefit plans, it did not publish detailed information on individual plans. Without this information, plan members would not be able to assess how well their plan performed compared with other plans and the effectiveness of FSCO in protecting their interests. In comparison, FSCO's counterparts in Australia and the United Kingdom publish such information.

In October 2015, FSCO began publishing online quarterly reports that show the overall solvency status of defined-benefit plans. During our follow-up, FSCO said it was reviewing what additional information it could also publish about pension plans that members might find useful. It planned to complete this review by the end of March 2017.

FSCO also said it did not intend to publish information about individual pension plans to preserve confidentiality. Plan members can compare their plan's performance against others in Ontario as a whole using information that is already public.

Financial Services

Recommendation 6

To adequately protect members and investors of co-ops, the Financial Services Commission of Ontario (FSCO) should seek to have the necessary legislative authority under the Co-operative Corporations Act *to allow it to ensure that:*

- *all board members have criminal checks before the co-op is registered and any offering statements are issued;*
  Status: Little or no progress.

Details

In our 2014 audit, we reported that FSCO did not require criminal background checks for members of boards of directors, or officers of new co-ops prior to co-ops issuing offering statements.

In December 2015, FSCO provided to the Ministry draft amendments to the *Co-operative Corporations Act* that included a clause it believed would allow FSCO to conduct such criminal background checks. FSCO told us that with such legislation it would conduct standard criminal reference checks for people incorporating co-ops, and that if past offences were found, it would consider them on a case-by-case basis.

Since then, little progress has been made in response to our recommendation. The Ministry is still reviewing FSCO's recommendations and considering whether legislative changes are necessary.

- *all approved offering statements are listed on FSCO's website;*
  Status: Fully implemented.

Details

In our 2014 audit, we noted that FSCO had not allocated any resources to ensuring that co-ops present to potential investors only approved (receipted) offering statements by, for instance, listing all approved offering statements on their websites for the public to check.

In May 2016, FSCO issued a bulletin to inform co-ops that basic information about co-op offering statements approved by the commission after July 1, 2016 would be posted on its website. FSCO started to post the information that month, but it told us that it did not plan to post any historical information from statements approved prior to July 1, 2016.

- *it conduct ongoing monitoring of co-ops; and*
  Status: Little or no progress.

Details

In our 2014 audit, we found that FSCO did not conduct ongoing monitoring of co-ops to ensure that funds were invested in the projects outlined in the offering statements, nor did it conduct ongoing examinations of these co-ops to ensure they complied with the requirements of the *Co-operative Corporations Act*, including that FSCO approve offering statements.

FSCO told us that a legislative change would be required for it to have the authority to conduct ongoing monitoring of co-ops and that it provided the Ministry with recommended legislative amendments in December 2015. The Ministry told us it is reviewing FSCO's recommendations and considering whether legislative changes to the *Co-operative Corporations Act* are necessary, but did not indicate when it would make a decision. FSCO told us that it would continue to focus on verifying co-ops' information during the initial registration period.

- *fees charged to co-ops to review offering statements are commensurate with FSCO costs.*
  Status: Little or no progress.

Details

In our 2014 audit, we found that the fee that FSCO was authorized to charge for reviewing co-ops' offering statements was not commensurate with the amount of work it was doing. We also reported that FSCO received $500,000 a year from the government to cover the costs of its activity in the co-op sector.

FSCO told us it would have been inappropriate to proceed with this recommendation during the mandate review, given the recommendation to move the oversight of co-ops to the proposed new regulatory body, the Financial Services Regulatory Authority. As of our follow-up, FSCO planned to begin an analysis of its costs in the co-op sector and recommend possible fee changes to the Ministry in 2017, subject to any announcement by the government on the mandate review.

In addition, FSCO should consult with the Ontario Securities Commission on the benefits of sharing or transferring the responsibility of reviewing offering statements.

Status: Fully implemented.

Details

In our 2014 audit, we reported that FSCO's review of offering statements was very similar to the Securities Commission's review of prospectuses, without the added protections that are provided to investors under the *Securities Act*. We noted that the Securities Commission had the expertise, experience and capacity to conduct reviews of prospectuses filed as part of public offerings, while FSCO had to develop expertise to review co-ops' offering statements, which are different from its other reviews.

In November 2015 and February 2016, representatives from FSCO and the Securities Commission met to conduct exploratory discussions about how a potential transfer of responsibility would be carried out. FSCO also said there was a standing offer in place from the Securities Commission to assist FSCO with reviewing complex offering statements in future. However, discussions were put on hold until the Ministry makes decisions with respect to the recommendations from the mandate review. The Ministry told us that it plans to make these decisions in fall 2016.

Recommendation 7

In order to make its licensing system and procedures effective so that only qualified agents are given licences, the Financial Services Commission of Ontario (FSCO) should ensure that:

- *its online licence system has the necessary controls to identify and reject licences for agents who do not meet minimum requirements;*
  Status: Little or no progress.

Details

In our 2014 audit, we noted that the insurance agent licensing system had weak controls. Life insurance agents whose information about errors and omissions insurance information was missing from the database or was incomplete, or those whose policies had expired, were still able to renew their licences or receive initial licences. Under the *Insurance Act*, all life insurance agents are required to have errors and omissions insurance.

Since our audit, FSCO added some controls to its insurance agent licensing system. For instance, free-form text fields for identifying insurance providers were removed and the system now automatically sends an email reminder to agents notifying them that their insurance is about to expire. FSCO was assessing if these controls and some other process improvements it had made improved the accuracy of the errors and omissions insurance information in its database. The assessment was expected to be completed sometime in 2017. FSCO said that it would then decide if any additional controls were required. Although the added controls were a step in the right direction, overall FSCO had made little progress in response to our recommendation, as the system still did not automatically verify if the errors and omissions insurance information was valid at

the time it was entered by an agent, allowing for the licensing of agents who did not meet minimum licensing requirements.

- *it establishes agreements with all agents' errors and omission insurance providers to provide FSCO with timely information on agents' compliance with insurance requirements, and information about consumer claims made against agents; and*
  Status: Little or no progress.

Details

In our 2014 audit, we noted that FSCO relied on insurance providers to notify it of insurance agents whose errors and omissions insurance had expired or been cancelled. However, it was not mandatory for errors and omissions insurers to provide this information to FSCO and only some of the 150 insurance providers voluntarily did this. We also noted from our testing of complaints that several agents had operated for up to three years before they were identified as not having errors and omissions insurance. FSCO was also not tracking information about how many insurance claims had been filed against agents by their clients and which claims were valid.

In 2016, FSCO assessed the feasibility of gathering information about claims filed against insurance agents using data collected by the General Insurance Statistical Agency and the Insurance Bureau of Canada to support consumer protection. However, FSCO found it was not feasible to use available industry data to obtain detailed information on errors and omissions claims against life insurance agents. FSCO has also committed to working with insurance industry stakeholders to collect additional data in 2016/17, but has not indicated that it will be establishing agreements with errors and omissions insurance providers.

- *it investigates all agents who do not meet minimum standards, particularly for errors and omissions insurance requirements.*
  Status: Little or no progress.

Details

In our 2014 audit, we found that FSCO renewed numerous agents' licences without investigating their applications, even though they had previously declared bankruptcy, had criminal convictions, or had invalid insurance. As of August 2014, almost one quarter of active life insurance agents had missing or incomplete insurance information in FSCO's database.

During our follow-up, FSCO informed us that, due to limited resources, it has not yet been able to investigate all agents who did not meet minimum standards. During 2015/16, FSCO identified 1,200 agents who had a higher risk of non-compliance and investigated 214 of them. It found four agents who were not meeting minimum standards and, as of the conclusion of our follow-up, was determining the appropriate regulatory action to take in those cases. FSCO said that in 2016/17 it plans to investigate 200 more agents.

Market Conduct

Recommendation 8

In order to ensure that the Financial Services Commission of Ontario (FSCO) meets its mandate to provide regulatory services that protect the public interest and enhance public confidence in the regulated financial sectors, FSCO should:

- *take timely action to investigate complaints, and have adequate systems and procedures in place to monitor the timelines and outcomes of its handling of complaints and investigations;*
  Status of both actions: Fully implemented.

Details

In our 2014 audit, we noted that FSCO had targets for closing 80% of consumer complaints within 75 days and 98% of all complaints within 365 days. Although most complaints were generally closed within these timelines, we found that several complaints about issues that posed high risk to consumers took years to close. For example, in one

case, a complaint was received in September 2010 about a life insurance agent allegedly forging client signatures. This complaint was not investigated until March 2012, and the final report was not completed until April 2014. FSCO dropped the case in June 2014, citing insufficient evidence.

During our follow-up, we found that in fiscal 2015/16, FSCO implemented monthly monitoring and reporting of complaint handling to measure whether it was meeting its targets, as stated above. We reviewed the results provided to us and noted that overall, FSCO met its targets for handling consumer complaints within 75 days, and its overall target of closing 98% of all complaints within 365 days.

FSCO also informed us that its Licensing and Market Conduct Division is reviewing successes against targets, reasons for unmet targets and practicality of measures developed. It said it would further refine the measures during 2016/17.

- *assess the need for proactive investigations in each of its regulated financial sectors that would allow for periodic examinations of all registrants and licensees;*

  Status: Little or no progress.

Details

In 2014, we reported that FSCO only conducted proactive onsite examinations for mortgage brokers. It conducted examinations in the other regulated financial sectors and for insurance agents only if a complaint led to an investigation. We noted that this created a risk that lack of compliance with regulations by financial institutions and agents might go undetected.

Although in 2016 FSCO began using a risk-based method to identify licensees and registrants for periodic examinations, it had not assessed the need for proactive investigations in each of its regulated financial sectors. FSCO told us it did not have sufficient staffing to conduct proactive investigations in each of its regulated financial sectors.

- *identify common issues from its examination activities and share them with the industry, and consider action that can be taken to mitigate their causes; and*

  Status: Fully implemented.

Details

During our follow-up, we noted that FSCO has published reports on its website with the overall results of its examinations of regulated entities and licensed individuals, such as mortgage brokers, life insurance agents and service providers. FSCO told us that it was considering actions to mitigate causes of common issues identified from its examinations.

- *establish systems and procedures to promptly identify, investigate and determine the continued suitability of registrants and licensees who have received sanctions from other associations.*

  Status: Fully implemented.

Details

In our audit report, we noted that many life insurance agents, mortgage brokers and mortgage agents could be members of other associations or licensed by other bodies. We found that several agents and brokers had been disciplined or permanently banned by other regulatory authorities for serious breaches, such as misappropriation of clients' funds, failure to remit taxes, or sale of unapproved securities, with FSCO not aware of these infractions until months, or even years, after they had occurred.

Previously, FSCO did not receive updates from all Canadian regulators about agents who could also be licensed in Ontario, but who had been disciplined or banned in other jurisdictions. However, FSCO implemented a new process in 2016 to identify agents who have been sanctioned by any of the 36 other relevant regulators in Canada. With this new notification process, FSCO identified almost 50 sanctions from other regulators against its licensees from January to July 2016.

FSCO also established targets for closing investigations into these cases, including that 90% are closed or assigned to disciplinary officers within 150 days; 98% are closed or assigned to disciplinary officers in 365 days; and 85% are closed within 365 days of being assigned to disciplinary officers.

Since December 2014, FSCO has also signed memorandums of understanding with the Mutual Fund Dealers Association of Canada, the Real Estate Council of Ontario and the Investment Industry Regulatory Organization of Canada with regard to mutual assistance and sharing of information, including the regulatory action they may take against one another's licensees and registrants.

Recommendation 9

To ensure that regulatory processes exist commensurate with the size and maturity of the industries, the Financial Services Commission of Ontario (FSCO) should explore opportunities to transfer more responsibility for protecting the public interest and enhancing public confidence to new or established self-governing industry associations, with oversight by FSCO. Areas that could be transferred include licensing and registration, qualifications and continuing education, complaint handling and disciplinary activities. In addition, associations could be responsible for establishing industry-sponsored consumer protection funds to provide more confidence in their services by the public. FSCO should then submit such proposals to the Ministry of Finance for consideration of legislative changes that would make it possible.

For regulated financial sectors, including insurance companies, credit unions and caisses populaires that have fewer registrants, FSCO, in conjunction with the Ministry of Finance, should explore the possibility of transferring its regulatory responsibilities to the federal Office of the Superintendent of Financial Institutions.

Status: Little or no progress.

Details

In our audit report, we noted that FSCO was responsible for overseeing more than 55,000 registrants and licensees in the insurance sector, and more than 11,000 in the mortgage sector. Given the size of these industries, we stated that it might be beneficial for them to take on greater responsibility for self-regulation, similar to insurance brokers, who are regulated by the Registered Insurance Brokers of Ontario. With this transfer of responsibility, FSCO could instead allocate its resources to regulating the oversight bodies instead of individual entities. We found that FSCO regulates some financial sectors that have few registrants, such as insurance companies operating in Ontario, credit unions and caisses populaires, and that the federal OSFI could assume this responsibility instead.

As noted at the beginning of this report, an expert panel submitted its final report to the Ministry in March 2016. Decisions regarding transfer of FSCO's responsibilities and changes to its mandate rest with the Ministry. When we finished our follow-up, the Ministry told us it expects to make its decisions about FSCO's responsibilities and mandate in the fall of 2016.

Ministry of Health and Long-Term Care

Immunization

Follow-Up on VFM Section 3.04, *2014 Annual Report*

RECOMMENDATION STATUS OVERVIEW					
	# of	Status of Actions Recommended			
	Actions Recommended	Fully Implemented	In Process of Being Implemented	Little or No Progress	Will Not Be Implemented
Recommendation 1	1			1.0*	
Recommendation 2	2		1.0	1.0	
Recommendation 3	1			1.0*	
Recommendation 4	4		1.5	2.5*	
Recommendation 5	1			1.0	
Recommendation 6	3		2.0	1.0	
Recommendation 7	1			1.0*	
Recommendation 8	1		1.0		
Recommendation 9	3			2.0	1
Recommendation 10	3	1	1.0	1.0	
Recommendation 11	4		3.0	1.0	
Total	**24**	**1**	**9.5**	**12.5**	**1**
%	**100**	**4**	**40**	**52**	**4**

* Targeted implementation in 2020

Background

Immunization with vaccines can reduce or eliminate the prevalence of many infectious diseases and therefore help maintain a healthier population and reduce the health-care costs associated with the treatment of these diseases.

Ontario's publicly funded immunization schedule includes vaccines that protect against 17 infectious diseases. Eligible people in Ontario can be immunized against these infectious diseases at no cost. Most vaccines are administered by family physicians, but other health-care providers also administer certain vaccines, such as public health nurses administering the Hepatitis B vaccine in middle schools and pharmacists administering the influenza vaccine.

The Ministry of Health and Long-Term Care (Ministry) has overall responsibility for Ontario's immunization program, including advising the government on which vaccines to publicly fund and

the eligibility criteria for each one. The federal government is responsible for approving new vaccines prior to their use.

We estimated that operational funding for Ontario's immunization program was about $260 million in the 2015/16 fiscal year ($250 million in 2013/14 fiscal year). However, because the Ministry does not routinely track the total costs of the immunization program, it does not know whether the program is being delivered cost effectively. Information on children's immunization rates still relies on parents reporting information to public health units, often years after their child is vaccinated, as opposed to health-care providers reporting the information when they administer the vaccines. Consequently, immunization coverage information is not reliable.

Other significant issues we noted in our 2014 audit included the following:

- There was minimal provincial co-ordination of the immunization programs delivered by the 36 municipally governed public health units in Ontario. Public health units act independently and are not responsible to Ontario's Chief Medical Officer of Health. Moreover, the Ministry had not determined the most effective model for delivering Ontario's immunization program.
- Ministry funding to the public health units varied significantly, from $2 per person in one public health unit area to $16 per person in another. The Ministry had not analyzed the reasons for these variations to determine if such cost discrepancies are justified.
- Ontario was implementing a new system called Panorama, which was to include a vaccination registry, at an estimated cost that had escalated by over $85 million and was expected to exceed $160 million. Only vaccinations previously entered in the old immunization tracking system and those given to middle-school students were contained in Panorama. Vaccines given to infants were not recorded at the time of immunization and therefore Panorama did not provide the data needed to identify areas of the province with low immunization coverage rates.
- Ontario's child immunization rates were below federal targets and, in most cases, below the level of immunization coverage necessary to prevent the transmission of disease. One public health unit reported that outbreaks would occur if its measles immunization coverage rate decreased by as little as 10% from its current immunization rate.
- The Ministry lacks information on immunization coverage in licensed daycares. Parents choosing a daycare for a child who is not able to be vaccinated cannot readily access public information on the percentage of children who are not immunized in each daycare. In one situation, we noted that 31% of children in a daycare were not immunized against measles.
- We found questionable flu immunization billings in 2013/14, including about 21,000 instances where the Ministry paid physicians and pharmacists for administering the flu vaccine more than once to the same person. As well, the Ministry did not have information on how many, of almost one million doses of the flu vaccine that it purchased, had actually been administered.
- The majority of the public health units we reviewed expressed concerns regarding excess and expired inventory at health-care providers. There is no cost to public health units or health-care providers who order more of the publicly funded vaccines than they use, and the Ministry has no system to consistently identify unreasonable orders. Health-care providers and public health units reported $3 million in vaccines expiring before use for the 2012/13 fiscal year.
- There was no process in place to ensure that new adult immigrants are immunized before or soon after arriving in Ontario. This makes them more susceptible to acquiring a vaccine-

preventable disease, which may spread to other unimmunized Ontarians.

Our recommendations included that the Ministry review the immunization program delivery structure and consider alternative options; develop processes to enable physicians and other health-care providers to electronically update the immunization registry each time they provide a vaccine to both children and adults; establish provincial immunization coverage targets and monitor whether they are being achieved; ensure that public health units are taking appropriate actions to identify and address areas of the province, including daycare centres and schools, with low immunization rates; publicly report immunization rates by daycare and school; and implement processes aimed at ensuring that the volume of vaccines ordered by health-care providers is reasonable.

Status of Actions Taken on Recommendations

In December 2015, the Ministry finalized a strategy to overhaul its immunization program by 2020. The 2020 strategy indicates the Ministry will address most of the recommendations made in our 2014 audit by that time, including reforming the governance and funding structure and reviewing the number and size of public health units; recording immunizations in a central database (Panorama) at the time of vaccination; developing immunization target coverage rates; and tracking actual rates of vaccination.

As such, and according to other information received from the Ministry, most of our recommendations are in the preliminary stages of being addressed. For example, the Ministry has initiated working groups and engaged consultants to oversee the redevelopment of immunization performance measures for public health units, and is implementing software that will allow physicians to record immunizations in a central electronic database (Panorama). Also, legislation requiring parents to attend a course if they opt to not vaccinate their school-aged children due to religious or conscience reasons only received first reading in May 2016. With the prorogation of the Legislature, however, this bill would have to be re-introduced and subsequently passed in order for these new requirements to apply to parents seeking exemptions from immunization.

As of the beginning of 2016, all public health units were inputting all middle-school immunizations, and any infant immunizations they had administered, directly into Panorama. However, no new immunizations had been directly entered by family physicians. Therefore, paper records, or the "yellow cards," continue to be used predominantly for recording immunizations. The Ministry's estimated date for establishing an electronic interface with Panorama that will allow each physician to input vaccination records and to be able to query immunization records is the summer of 2017.

The Ministry added HPV immunization for boys in Grade 7 and shingles immunization for seniors aged 65 to 70 to the publicly funded schedule in 2016, as a result of re-evaluation of a long-term cost benefit analysis, and the shingles vaccine now being available in a fridge-stable form, respectively.

Overall, few of the recommendations we made in our *2014 Annual Report* have been implemented. While it is understandable that systemic changes such as establishing access to the Panorama system in doctors' offices could require some lead time, in our view, six years to implement some of the recommendations (between our 2014 audit and the 2020 strategy's end time) is excessive. The Ministry indicated it will not implement our recommendation to disallow duplicate billings by health care providers that administer the flu vaccine. Also, the Ministry has made little progress toward some of our recommendations relating to the following: publicly reporting immunization rates at daycares; identifying schools with low immunization rates; providing immunizations to all immigrants before they enter Ontario; and improving on the collection

of information on pharmacists and public health unit staff who have administered vaccines associated with adverse events.

Complex Program Delivery Structure

Recommendation 1

To ensure that Ontario's immunization program is delivered in an efficient and cost-effective manner, the Ministry of Health and Long-Term Care should review the immunization program delivery structure, including total funding and the allocation of funding to public health units. Such a review should consider alternative delivery options.

Status: Little or no progress made.

Details

The Ministry's 2020 strategy includes a plan to conduct a prospective review of how immunization services are delivered, with the goal of increasing immunization rates. The Ministry also facilitated a meeting of stakeholders in spring 2016 to discuss how immunizations are delivered in Ontario.

The Ministry indicated that it has not considered structural changes to the delivery of immunization services, such as the potential merging of neighbouring health units serving small populations. The Ministry informed us that since health units deliver about a dozen services other than immunization, a decision to merge would require a broader review of the public health system. The Ministry indicated that as part of its Patients First commitment, it plans to appoint an Expert Panel on Public Health, with the mandate of providing advice on structural, organizational and governance changes to public health. The Ministry plans to implement changes to the public health system in the future, which will be informed by the findings of this panel.

In regard to funding, the Ministry completed an internal review in 2013 of the funding methodology for public health units, which recommended using a formula where socio-economic characteristics of the local population, geography and health risks would determine appropriate funding levels. In 2015, the Ministry used this formula to proportionately allocate 2% additional funding to eight health units based on their socio-economic profiles. The Ministry has indicated that it will apply the funding formula on a year-by-year basis with some flexibility to address local needs. At the time of our follow-up, the Ministry had finalized its public health unit funding for 2016, which included application of the funding formula.

Cost and Reliability Concerns with New Information System

Recommendation 2

Prior to proceeding with the implementation of Panorama's outbreak and investigation components, the Ministry should assess the current data completeness and accuracy deficiencies of Panorama. In this regard, to ensure that public health units have access to reliable immunization registry information in the event of an outbreak, and to send reminders to those who are due for immunizations (for example, for children according to the immunization schedule and for adults every 10 years for their tetanus booster), the Ministry of Health and Long-Term Care (Ministry) should develop processes, as part of its implementation of Panorama, that enable physicians and other health-care providers to electronically update the immunization registry each time they provide a vaccine, including those provided to adults.

Status: In the process of being implemented by the summer of 2017.

Details

Vaccines administered by physicians represent the majority of vaccinations received over a person's lifetime. As a part of its 2020 strategy, the Ministry intends to record and track all immunizations in Panorama, including those given to infants by physicians.

The only data currently contained in Panorama has been either transferred from the old immunization tracking system or entered by public health units. At the time of our follow-up, the Ministry was in the process of developing a software tool

for physicians to use to record vaccinations in Panorama at the time they are administered. The Ministry commissioned an external consultant to develop the software tool in the summer of 2015. The Ministry plans for physicians to be able to input vaccinations in Panorama by the summer of 2017, at which time they will also be able to query patients' immunization records.

As well, to better contain the escalation of costs to implement all four components of Panorama, the Ministry should review the costs and benefits of implementing the system's outbreak and investigation components to determine whether they will meet the Ministry's needs. If they are assessed to be cost-beneficial, the Ministry should develop a plan, including a budget and timelines, to implement these components in a cost-effective and timely manner.

Status: Little or no progress made.

Details

In March 2015, Cabinet approved the removal of modules on outbreak management and investigations of vaccine-preventable diseases from the scope of the Panorama system's implementation. The Ministry had already internally decided to remove these two modules at the time of our 2014 audit. Without them, the management and investigation of disease outbreaks will continue to be performed through the old system. The Ministry has indicated that the old system will support these functions for another three to five years. It plans to begin a preliminary assessment of other technological options for performing outbreak management and investigation functions in the spring of 2017, which may include actually implementing the two modules of Panorama that were previously removed, continuing with the existing system, or acquiring a different software tool. The Ministry also plans to complete a review of lessons learned from British Columbia's implementation of these two Panorama modules. At the time of our follow-up, the Ministry had not conducted an analysis of the costs and benefits of implementing the two modules.

Better Tracking of Immunization Coverage Rates Needed

Recommendation 3

To promote higher vaccination coverage rates, including the achievement of herd immunity levels, and thereby protect against the spread of vaccine-preventable diseases, the Ministry of Health and Long-Term Care should establish targeted provincial immunization coverage rates for all vaccinations, and monitor, in conjunction with Public Health Ontario, whether they are being achieved.

Status: Little or no progress made.

Details

The Ministry retained a consultant to prepare a performance management and measurement framework in 2015, but this framework did not include any targeted coverage rates. The Ministry plans to continue to informally use the national immunization targets established by the Public Health Agency of Canada. The Ministry indicated that it might adopt these rates more formally after the Public Health Agency of Canada completes a review of coverage targets, which the Ministry will participate in. This review began in the summer of 2016.

Inadequate Process to Track and Address Low Immunization Coverage Rates for Children

Recommendation 4

To help prevent outbreaks by ensuring that a sufficient percentage of Ontario's population, including children, is vaccinated, the Ministry of Health and Long-Term Care should—together with improving the completeness and accuracy of the data tracked by Panorama's immunization registry—do the following:

- *harmonize the immunization requirements, including the vaccination, exemption and suspension processes, between schools and daycare centres by exploring the possibility of developing*

one overall piece of legislation to address disease prevention and infection control in daycares and schools, as recommended in the 2014 Immunization System Review;

Status: In the process of being implemented by December 2017.

Details

The Ministry has not developed an overall piece of legislation to address immunization requirements for both daycares and schools. However, in August 2015 the *Day Nurseries Act* was replaced by the *Child Care and Early Years Act*, and an amendment to it came into effect in August 2016 requiring parents of children in daycare to complete a Ministry-issued form and to swear before a commissioner for taking affidavits (e.g., lawyer, justice of the peace) that an immunization conflicts with their religious or conscience convictions. This is the same requirement and process for seeking non-medical exemptions for students attending school under the *Immunization of School Pupils Act*. While an overall piece of legislation was not introduced, the exemptions process has been harmonized by amending the *Child Care and Early Years Act*.

Regarding the harmonization of processes to suspend children who are not immunized, the regulations under the *Child Care and Early Years Act* give the Ministry of Education the authority to require daycares to comply with recommendations made by a public health unit regarding any matter that may affect the health or well-being of a child in daycare. The Ministry indicated that it plans to develop a process through which public health units can request the Ministry of Education to require daycares to obtain from parents of children in their care either a record of completed immunizations or an exemption form. The daycare may then suspend unimmunized children if their parents do not provide this information. The Ministry plans to implement this process when it finalizes updates to the Ontario Public Health Standards by the end of 2017.

Public health units continue to have authority and established processes for suspending unimmunized school students without exemptions.

- *review options for ensuring that parents who exempt their children from vaccinations for non-medical reasons are aware of the risks and benefits of being immunized, such as by requiring a signed statement from a physician stating that the parent received information on the risks and benefits of the vaccine;*

  Status: In the process of being implemented for children in school when the bill amending the *Immunization of School Pupils Act* is passed; little or no progress made for children in daycare.

Details

In May 2016, the Ministry proposed an amendment to the *Immunization of School Pupils Act* that would require parents of school pupils who wish to exempt their children from immunization for religious or conscience reasons to attend a course on the risks of not vaccinating their child. Since the Legislature was prorogued at the time of our follow-up, the bill amending the Act could not be passed. Consequently, the Ministry could not estimate whether it will become mandatory for children attending school in the 2017-2018 school year, or a later year. The Ministry had yet to finalize the format and content of the course, and whether to make it available online or in-person only.

The Ministry has not finalized whether to require parents of children in daycares seeking a non-medical exemption from vaccinations to attend the proposed educational course on the risks of not vaccinating. The requirement currently only applies to parents of school children.

- *ensure that public health units are taking appropriate actions to identify and address areas of the province, including daycare centres and schools, with low immunization coverage rates; and*

  Status: Little or no progress made.

Details

In February 2015, the Ministry sent a letter to all public health units asking them to identify and report back any instances of their non-compliance with public health standards on vaccine-preventable diseases, along with a plan to achieve compliance. One of these standards is the requirement of public health units to monitor coverage rates, but the Ministry's letter did not specifically ask public health units to report on whether they have evaluated immunization rates at schools and daycares in their region, identified any with low coverage rates, and taken relevant action to address them. Of the 19 public health units that reported non-compliance, only one explicitly reported having identified schools with low immunization rates for measles. The others did not report whether they had performed a review to identify such schools.

To strengthen the requirement for public health units to identify and address areas with low immunization coverage rates, the Ministry indicated that it will update Ontario's public health standards, and plans to do so by the end of 2017, and strengthen the requirements for public health units to perform such reviews.

- *publicly report immunization coverage rates by daycare and school so that parents of children who cannot be immunized can choose to send their child to a daycare centre or school with a larger percentage of vaccinated children, where an outbreak is less likely.*

  Status: Little or no progress made.

Details

The Ministry informed us that it plans to expand public reporting by publishing immunization coverage rates on a local basis, for example, by public health unit, school or school-board level, as part of its 2020 strategy. The Ministry indicated that it plans to begin publicly reporting immunization rates by school in March 2019 as part of the rollout of Panorama.

Because public health units are not currently required to receive children's immunization records before they are enrolled in school, the information necessary to determine and report immunization coverage rates at daycares is not currently available. The Ministry informed us that it plans to begin, in March 2019, to evaluate the feasibility of reporting immunization rates by daycare after it implements this requirement for schools. This will be made possible if a proposed amendment to the *Immunization of School Pupils Act* is passed to require physicians to report immunization information directly to public health units. If this occurs, the immunization status of children would be available at the time when they start attending daycare.

Process Needed to Better Deal with Vaccine-Preventable Disease Entering Canada

Recommendation 5

To reduce the risks of importing cases of vaccine-preventable disease into Ontario, the Ministry of Health and Long-Term Care, in conjunction with provincial stakeholders, including the Ministry of Citizenship and Immigration, should explore, in discussions with the federal government, the possibility of providing immigrants the opportunity to receive required vaccinations before arriving in Ontario. This would include consistently providing information on immunization to new immigrants.

Status: Little or no progress made.

Details

Although Ontario has not introduced new policies to address the immunization of immigrants, new policies were introduced regarding the Syrian refugee situation. In January 2016, the Ministry, in conjunction with Public Health Ontario, provided tailored education material to both Syrian refugees and primary-care physicians highlighting the importance of their immunization. This was aimed at ensuring refugees were immunized as soon as possible once they reached Ontario. The Ministry

introduced this measure because refugees are considered higher risk than other immigrants as they are susceptible to more illnesses due to exhaustion and other stresses and the lack of organized immunization services in refugee camps. However, this program is not able to stop illnesses from entering the province.

The federal government has expressed its intention to offer and fund immunizations for all refugees prior to entering Canada, as a part of the "Immigration Medical Exam," starting in April 2017. This physical examination is performed before refugees depart for Canada and also includes a urine test and chest X-ray. While the Ministry has informed us that it is advocating for further expansion of this initiative to all newcomers, at the time of our follow-up the Ministry was still in the early stages of its discussions with the federal government and had not yet identified a timeline for implementing this requirement.

Improvements Needed to Promotion of Immunization

Recommendation 6

To ensure that Ontarians can easily access information on the risks and benefits of immunizations, the Ministry of Health and Long-Term Care should:

- *in conjunction with stakeholders such as the College of Physicians and Surgeons of Ontario, ensure that physicians have easy access to clinical and technical evidence on vaccines, and to materials that provide simple terms for physicians' use when providing explanations to patients;*

  Status: In the process of being implemented by the end of 2018.

Details

The Ministry has developed and, in September 2016, distributed accessible clinical and technical information about five vaccines for physicians to use, and a series of fact sheets that provide simple terms and explanations about vaccines for patients. These include practical steps parents can take before, during and after a vaccine, such as being alert for common soreness and swelling or symptoms of a rare adverse event following immunization. The Ministry has also developed information on ten vaccine-preventable diseases, and included these on its website, called the Immunization Well-Child Toolkit. Physicians can also provide this information to parents and patients.

- *determine whether the bonus payments currently made to certain physicians are resulting in improved immunization rates in a cost-effective manner;*

  Status: Little or no progress made.

Details

Immunization bonuses were introduced in the late 1990s through contract negotiations with the Ontario Medical Association (the body that negotiates payment contracts for all Ontario doctors) prior to our audit. The Ministry has determined that there is little evidence suggesting that bonus payments, whereby family physicians receive up to $2,200 for immunizing 95% of the children in their practice, have resulted in improved immunization rates. Any future change to the immunization bonus program would be subject to the Ministry's negotiations with the Ontario Medical Association.

- *help reduce duplication of effort by public health units in addressing concerns locally, by considering a more co-ordinated approach to public education regarding all vaccines, including a website that provides clear and understandable information on vaccine hesitancy issues.*

  Status: In the process of being implemented by December 2017.

Details

In the summer of 2015, the Ministry surveyed public health units to better understand their needs for ministry-produced educational materials. Public health units indicated that they produce their own educational materials about half of the time

because often the ministry-produced materials are too generic (for example, local clinic information is not included), or they are received too late to be useful. However, public health units also indicated that because their communications teams are often small, the Ministry and Public Health Ontario could help by providing insight on the most effective communication approaches. As part of updating Ontario's Public Health Standards, the Ministry will begin reviewing a draft of a more formal protocol in December 2016, which is to outline what educational materials are best developed centrally and provided in a generic form, and which materials are best developed by individual health units. The Ministry expects to finalize the protocol by the end of 2017.

Regarding vaccine hesitancy materials, as noted in the previous section, the Ministry developed the Immunization Well-Child Toolkit in 2015, which includes a number of educational materials and fact sheets that both physicians and public health units can provide to parents and patients who are vaccine-hesitant.

Cost-Benefit Analysis Needed of Some Federally Recommended Vaccines

Recommendation 7

The Ministry of Health and Long-Term Care should implement a consistent process for examining the costs and benefits for Ontario of publicly funding vaccines recommended by the National Advisory Committee on Immunization. This process should include an examination of situations in which the vaccination costs are found to be less than the health-care costs of treating people who acquire a vaccine-preventable disease.

Status: Little or no progress made.

Details

As was the case at the time of our audit, prior to adding a vaccine to Ontario's publicly funded immunizations, the Ministry consults various scientific studies produced at the national and provincial levels. Based on a review of this evidence, the Ministry makes a decision. Since our 2014 audit, the Ministry has added two vaccines recommended by the National Advisory Committee on Immunization to Ontario's publicly funded schedule and used a similar process to that followed at the time of our audit. The Ministry still has not adopted a consistent process for examining the costs and benefits of publicly funded vaccines in Ontario.

At the time of our follow-up, Public Health Ontario's analysis indicated that the shingles (Herpes Zoster) vaccine was particularly cost-effective for people aged between 65 and 70. The Ministry did not previously provide it to these people because, unlike other vaccines, the shingles vaccine at the time was required to be stored frozen until it was administered. The shingles vaccine can now be refrigerated similar to other vaccines. Consequently, in September 2016, the Ministry made the shingles vaccine available to Ontario seniors between the ages of 65 and 70 free of charge. This decision results in some of the people in the recommended age group receiving the vaccine, but not all because the Ministry did not provide the vaccine to seniors between 60 and 65 years of age, even though the analysis indicated it was cost-effective for this age group as well.

In the case of HPV, the Ministry re-examined studies conducted in 2012 and determined HPV immunization for boys to be cost-beneficial. HPV vaccines for boys are to be given in grade 7 starting in the 2016–17 school year.

Previously, these two vaccines accounted for the major differences between nationally recommended immunizations and the ones publicly funded in Ontario. However, the decisions to approve these two vaccines were based on different decision models, and not a consistent process for evaluating costs and benefits: one was based on practical considerations regarding storage conditions; and the other on a re-examination of a comparison between the cost of the vaccine against the number of healthy years a patient is expected to gain as a result of the vaccine.

Better Oversight of Influenza Immunization Program Needed

Recommendation 8

If there is support for the efficacy of the influenza vaccine to reduce the transmission of influenza, to help reduce the risk of hospitalized patients contracting influenza, the Ministry of Health and Long-Term Care (Ministry) should consider requiring hospital staff to either be immunized or wear a mask, similar to the practice in British Columbia, and monitor compliance. This could possibly be established in agreements between the Ministry and Local Health Integration Networks (LHINs), and LHINs and hospitals.

Status: In the process of being implemented by summer of 2017.

Details

In October 2015, Public Health Ontario completed a review of strategies used in Canadian and U.S. hospitals to prevent and control hospital-acquired influenza, including a review of "vaccinate or mask" policies. It concluded that these policies were effective in increasing flu immunization rates among hospital staff. However, Public Health Ontario also noted that available evidence on the effectiveness of hospital staff immunization in reducing flu transmission in hospitals was limited and further research on the topic is necessary. The Ministry anticipates further information on this to become available when a study that is currently underway across several Toronto hospitals is completed in the summer of 2017.

Staff at one Ontario hospital challenged that hospital's "vaccinate or mask" policy and in September 2015, after contentious discussions and sometimes conflicting testimony from medical experts, an arbitrator struck down the policy as an unreasonable condition of employment. The Ministry informed us that this decision applies to only this hospital and it would continue to encourage all health-care workers to be immunized against the flu. The Ministry also informed us that the arbitrator's decision would have no impact on the deliberations of an executive steering committee that was tasked in spring of 2015 with providing a recommendation on whether to implement a "vaccinate or mask" policy throughout the province. At the time of our follow-up, the steering committee had not made a recommendation but was planning to do so by the end of 2016. The Ministry indicated it would make a decision on the "vaccinate or mask" policy by the spring of 2017.

Improvements to Influenza Vaccine Program Needed

Recommendation 9

Given the rapidly growing interest on the part of pharmacists to administer the influenza vaccine, the Ministry of Health and Long-Term Care (Ministry) should assess the reasonableness of the rate paid to pharmacists to administer the vaccine so as to ensure that it is not excessive and is commensurate with pharmacists' costs and experience.

Status: Little or no progress made.

Details

In the fall of 2015, the Ministry compared the fees payable to Ontario pharmacists for administering the flu shot to those paid to pharmacists in other provinces. This comparison indicated that the $7.50 Ontario fee was lower than those paid in most other provinces. However, during our 2014 audit we noted that the Ministry had not performed an analysis of the relative costs and experience of the different health-care providers that were administering the flu vaccine to determine the reasonableness of the amount paid to pharmacists. At the time of our follow-up, the Ministry indicated that it would conduct further analysis of the reasonableness of the fee.

To help prevent health-care providers from administering a duplicate influenza vaccine to people who have already been vaccinated and to identify erroneous duplicate billings, the Ministry should:

- *review and revise its claims payment systems to reject billings from health-care providers for patients who have already received their influenza vaccine; and*

  Status: Will not be implemented. Though consideration should be given to the minority of patients who require two doses of the flu vaccines, we continue to recommend that the claims payment system be updated to reject billings for patients who have already received an influenza vaccine.

Details

In May 2015, the Ministry implemented changes to its billing system, which now disallows payments for flu vaccinations outside of the flu season (which is September to May), and payments for a third immunization for the same person within a flu season. The Ministry indicated that payments for duplicate immunizations continue to be allowed since some patients, such as those with a compromised immune system, may require two doses within one season. We noted in our 2014 audit that only a minority of patients legitimately requires two vaccine shots to create immunity against the flu. However, the Ministry does not intend to revise its claim system to reject duplicate payments because the Ministry has concluded that duplicate physician billings for the flu vaccine occur too infrequently to warrant such measures.

- *periodically compare payments made to physicians for administering the influenza vaccine to those made to pharmacists, and follow up on duplicate payments made for the same patient.*

  Status: Little or no progress made.

Details

The Ministry informed us that while it had not yet done so at the time of our follow-up, it planned to review billing data to identify any inappropriate billing patterns for the 2014/15 and 2015/16 flu seasons, and conduct a manual review of health-care providers to determine if the services they provided were appropriate. This review is to be completed by March 2017. During the 2015/16 flu season around 870,000 flu vaccinations were administered by pharmacists. No comparison of pharmacists' and physicians' flu-vaccination billings were made for the 2014/15 or the 2015/16 flu season to identify duplicates because the Ministry had not linked the two billing systems. The Ministry indicated that it planned to compare the billings for the 2015/16 flu season by March 2017.

Better Tracking Needed of Adverse Events Following Immunization

Recommendation 10

To enable meaningful analysis of adverse events following immunization and to help prevent future adverse events, the Ministry of Health and Long-Term Care, in conjunction with Public Health Ontario, should:

- *require health-care providers who administer vaccines to give patients standardized information about which adverse events should be reported;*

  Status: Fully implemented

Details

In spring 2016, the Ministry and Public Health Ontario developed a fact sheet with information for parents on how to identify a reaction that could indicate an adverse event following immunization, such as worsening swelling at the injection area or rash. The fact sheet suggests an adult patient or a child's parent call the health-care provider who administered the vaccine to report the adverse event. Starting in the summer of 2016, as part of physician office inspections to ensure compliance with vaccine storage requirements, public health units began providing copies of the fact sheets to physicians and educating them on the importance of distributing the fact sheets to patients at the time of vaccination. The Ministry plans to survey physicians in the summer of 2017 to evaluate the effectiveness of this approach. Although the

Ministry has not implemented a strict requirement for health-care providers administering a vaccine to provide the fact sheet to parents, it has developed a fact sheet and is encouraging its use.

- *collect information on health-care providers who have administered vaccines associated with adverse events; and*
  Status: Little or no progress made.

Details

In April 2015, in response to our recommendation, Public Health Ontario updated the requirements on the information that public health units were required to collect regarding adverse events following immunization, making it mandatory for public health units to input the name of the physician who administered the vaccine. Having this information available makes it possible to identify physicians with unusually high adverse event rates. However, while Public Health Ontario collects the names of the other health-care providers that administer the flu vaccine, such as pharmacists and public health unit nurses, it does not enter them into its database. The Ministry is planning to require that the identity of pharmacists start to be collected by requiring that this information be entered in the database. The Ministry is considering whether to also require public health unit nurse identities to be entered in the database.

- *follow up on any unusual trends, including areas where adverse event rates look unusually low or high.*
  Status: In the process of being implemented by December 2017.

Details

In the spring of 2014, following our field work, for cases where it determined that reported adverse event rates were unusually low, Public Health Ontario began contacting public health units' Medical Officers of Health to discuss strategies on how to ensure adverse events do not go unreported. Beginning with its November 2015 report on vaccine safety, Public Health Ontario published the rates of reported adverse events following immunization per 100,000 of the population for each public health unit. These rates ranged from less than 1 per 100,000 population to over 27 per 100,000. For the 2017 calendar year, the Ministry plans to implement a performance indicator capturing the adverse event reporting rates for Meningococcal, HPV and Hepatitis B immunizations that health units administer to middle school students. These will be included in the Ministry's agreements with public health units and consequently any unusually high or low reported rates will be identified for follow-up.

Better Oversight of Vaccine Wastage Needed

Recommendation 11

To minimize vaccine wastage and maintain vaccine potency, the Ministry of Health and Long-Term Care should:

- *implement processes aimed at ensuring that the volume of vaccines ordered by and distributed at no cost to health-care providers is reasonable (for example, by monitoring information on their inventory levels through the new Panorama system);*
  Status: In the process of being implemented by the summer of 2017.

Details

Starting in November 2015, all 36 public health units started using the inventory module of Panorama, which means that the Ministry is now able to review and assess vaccine inventory in public health units as well as the quantities distributed to physicians' offices by the health units. Also in 2015, the Ministry updated the standard form used by physicians to order new vaccines; the form now requires physicians to include the number of vaccines they currently have on hand. This information can help the Ministry ensure that physicians'

offices do not order unreasonably large amounts of vaccines (that is, more than a month's worth). The Ministry indicated that public health units can now use Panorama to generate reports showing the monthly vaccine orders of each physician. They can therefore estimate the amount of vaccines a physician would use in a month and assess the reasonableness of vaccine orders. More accurate information on vaccine inventory levels at physicians' offices will become available when vaccinations are entered into Panorama as they are administered, which is not scheduled to occur until the summer of 2017.

- *revise the minimum standards for the types of fridges and thermometers used by health-care providers in vaccine storage, such as by prohibiting the use of bar fridges and min-max thermometers, which are less reliable at maintaining the correct vaccine temperature or providing information about the length of time fridge temperatures were outside an acceptable range needed to maintain vaccine potency;*
  Status: Little or no progress made.

Details

At the time of our follow-up, physicians were still permitted to use bar fridges and min/max thermometers. The Ministry plans to update the Public Health Standards in December 2017, which is to include requirements for storing publicly funded vaccines. The Ministry informed us that it plans to include a requirement for physicians who use bar fridges to store vaccines, to use data-logging thermometer to assess whether vaccines could have been spoiled by temperatures outside the acceptable range. While this measure would not reduce the risk of exposing vaccines to temperatures outside the safety range, which has been attributed to small generic bar fridges, it could at least provide data on the duration of exposure to more accurately assess whether a vaccine's potency has been affected.

- *in conjunction with the public health units, obtain and review information on vaccine wastage by each health-care provider, and follow up on providers with higher wastage levels; and*
  Status: In the process of being implemented by spring 2017.

Details

Prior to June 2016, the agreements between the Ministry and public health units did not hold the public health units accountable for vaccine wastage occurring at physicians' offices. In June 2016, the Ministry introduced a performance indicator that required public health units to monitor and minimize vaccine wastage in physicians' offices for one of the more common vaccines, the measles, mumps and rubella vaccine. The Ministry indicated that it plans to analyze the data forwarded from public health units in January 2017 from this new indicator and follow up with public health units in the spring of 2017. The Ministry also plans to follow up with public health units in spring 2017 regarding the wastage they have identified at physicians' offices.

- *review whether the process followed by public health units to inspect health-care providers' offices would be more cost-effective if it used a risk-based approach, such that providers that have higher wastage levels—whether because vaccines are not being kept at the correct temperature or because vaccines are expiring before they can be used—receive more focus, and require some inspections to be performed on an unannounced basis.*
  Status: In the process of being implemented by March 2018.

Details

Since May 2016, the Ministry has required public health units to conduct unannounced inspections of physician offices with either prior instances of high wastage of vaccines or inappropriate vaccine storage practices. In such cases, the public health units are also to provide education on appropriate

inventory management practices, reducing vaccine orders, encouraging stock rotation and minimizing vaccine stock at the provider's office. At the time of our follow-up, the Ministry indicated that it was planning to develop an evaluation framework to assess whether the current process would be more cost-effective if it used a more risk-based approach, such as sometimes waiving the requirement for an annual visit if the physician in question had low wastage in the past. The Ministry planned to complete this assessment by March 2018.

Ministry of Infrastructure (formerly the Ministry of Economic Development, Employment and Infrastructure)

Infrastructure Ontario—Alternative Financing and Procurement

Follow-Up on VFM Section 3.05, *2014 Annual Report*

RECOMMENDATION STATUS OVERVIEW					
	# of	Status of Actions Recommended			
	Actions Recommended	Fully Implemented	In Process of Being Implemented	Little or No Progress	Will Not Be Implemented
Recommendation 1	1		1		
Recommendation 2	3	2	1		
Recommendation 3	1			1	
Recommendation 4	1			1	
Recommendation 5	1		1		
Recommendation 6	1	1			
Recommendation 7	1		1		
Recommendation 8	1	1			
Recommendation 9	1	1			
Recommendation 10	1	1			
Total	**12**	**6**	**4**	**2**	**0**
%	**100**	**50**	**33**	**17**	**0**

Background

When the Province constructs public-sector facilities such as hospitals, court houses and schools, it can either manage and fund the construction itself or have the private sector finance and deliver the facilities under what is called an Alternative Financing and Procurement (AFP) approach, a form of public–private partnership frequently used in Ontario. Contractual agreements between the government and the private sector define AFP arrangements. Under these agreements, private-sector businesses deliver large infrastructure projects, and the various partners (private sector and public sector) share the responsibilities and business risks of financing and constructing the project on time and on budget. In some cases, the private sector is also responsible for the maintenance and/or operation of the project for 30 years after it is built.

The private sector initially finances construction of AFP projects, but as with projects delivered by the public sector, the Province ultimately pays for

these projects under the terms of their contracts, some of which are up to 30 years. The Province's March 31, 2016, public accounts reported almost $36.6 billion in liabilities and commitments that the present and future governments, and ultimately taxpayers, will have to pay. However, the financial impact of AFP projects is higher since the Province has also borrowed funds to make the payments to AFP contractors when the various projects reached substantial completion. These borrowed amounts are part of the total public debt recorded in the Province's Public Accounts.

Since 2005, large-scale infrastructure projects under the AFP model have been managed by Infrastructure Ontario. To assess whether each large infrastructure project should be delivered using the AFP approach versus directly by the public sector, Infrastructure Ontario conducts "value-for-money" (VFM) assessments. These VFM assessments compare the estimated project costs of the public sector delivering the project (known as the public-sector comparator, or PSC) with the estimated cost of delivering the same project to the identical specifications using the AFP delivery model. If the cost for the AFP delivery model is less than the cost for public-sector delivery, then there is positive VFM by procuring the project using the AFP approach.

For 74 infrastructure projects, either completed or under way at the time of our audit in 2014, where Infrastructure Ontario concluded that private-sector project delivery under the AFP approach would be more cost effective, we noted that the tangible costs (such as construction, financing, legal services, engineering services and project management services) were estimated to be nearly $8 billion higher than they were estimated to be if the projects were contracted out and managed by the public sector. The majority of this ($6.5 billion) relates to private-sector financing costs.

However, Infrastructure Ontario estimated that this $8-billion difference was more than offset by the risk of potential cost overruns if the construction and, in some cases, the maintenance of these 74 facilities was undertaken directly by the public sector. In essence, Infrastructure Ontario estimated that the risk of having the projects not being delivered on time, and on budget, was about five times higher if the public sector directly managed these projects versus having the private sector manage the projects.

We also noted the following:

- There is no empirical data supporting the key assumptions used by Infrastructure Ontario to assign costs to specific risks. Instead, the agency relies on the professional judgment and experience of external advisers to make these cost assignments, making them difficult to verify. In this regard, we noted that often the delivery of projects by the public sector was cast in a negative light, resulting in significant differences in the assumptions used to value risks between the public sector delivering projects and the AFP approach.
- In some cases, a risk that the project's VFM assessment assumed would be transferred to the private-sector contractor was not actually transferred, according to the project's contractual agreement. For example, the VFM assessment for a hospital project assumed the contractor would bear the risks of design changes; however, this hospital project's contract indicated that the contractor was not responsible for project design, and that the public sector was responsible for the risk of design changes.
- Two of the risks that Infrastructure Ontario included in its VFM assessments should not have been included. Their combined cost over the 74 AFP projects was almost $6 billion. If they had not been included in the VFM assessments, public-sector delivery for 18 of these projects would have been assessed as $350 million cheaper than delivery under the AFP approach.

Based on our audit work and review of the AFP model, we noted that achieving value for money under public-sector project delivery would be possible if contracts for public-sector projects have

strong provisions to manage risk and provide incentives for contractors to complete projects on time and on budget, and if there is a willingness and ability on the part of the public sector to manage the contractor relationship and enforce contract provisions when needed.

Infrastructure Ontario has a strong track record of delivering projects such as hospitals, courthouses and detention centres on time and on budget. It may now be in a position to utilize its expertise to directly manage the construction of certain large infrastructure assets and thereby reduce the cost to taxpayers of private-sector financing. There is a role for both private-sector and public-sector project delivery. As experience with AFPs has developed, it may be time to assess what those roles and the financing mix should be going forward.

We recommended that Infrastructure Ontario gather data on actual costs from recent projects—both AFP and non-AFP—and revise its VFM assessment methodology to ensure that its risk valuations are justified; confirm that all risks assumed to be transferred to the AFP contractor are actually transferred in contracts; and that Infrastructure Ontario be engaged in traditional forms of procurement to utilize the experience that it has gained in delivering AFPs, for the most part, on time and on budget, in order to achieve additional cost benefits for Ontario taxpayers.

We made a number of recommendations for improvement and received commitments from Infrastructure Ontario that it would take action to address them.

Standing Committee on Public Accounts

On March 25, 2015, the Standing Committee on Public Accounts (Committee) held a public hearing on our 2014 audit on Alternative Financing and Procurement. In June 2015, the Committee tabled a report in the Legislature resulting from this hearing. The Committee endorsed our findings and recommendations. The Committee made six additional recommendations. Infrastructure Ontario and the Ministry of Infrastructure (called the Ministry of Economic Development, Employment and Infrastructure at the time of our audit) reported back to the Committee at the end of September 2015. The Committee's recommendations and follow-up on their recommendations are found in **Chapter 3**.

Infrastructure Ontario Special Committee Review and Investigation

In September 2015, reporters from *The Globe and Mail* met with Infrastructure Ontario's senior executives and the then vice-chair of its board of directors regarding allegations against a former employee who had been fired in February 2012. The employee was alleged to have been involved in a false invoicing scheme at York University and to have failed to disclose conflicts of interest in the procurement of the St. Michael's Hospital redevelopment project.

Due to the seriousness of these allegations, Infrastructure Ontario formed a Special Committee in October 2015 to review and report on the following:

- whether the employee's conduct or activities were improper or unauthorized in any way, including whether the employee communicated confidential Infrastructure Ontario business information to unauthorized persons or engaged in any financial malfeasance;
- the St. Michael's Hospital procurement and other Infrastructure Ontario projects in which the employee was involved;
- the circumstances relating to the employee's departure from Infrastructure Ontario; and
- any other related or ancillary matters that the Special Committee or the Minister of Infrastructure determines should be looked into.

On September 6, 2016, Infrastructure Ontario made the results of this review public. The review found that the employee failed to disclose all of his potential conflicts of interest in the St. Michael's

Hospital procurement. However, no evidence was found of any attempt to inappropriately influence the procurement evaluation for this project, and the procurement process for this project was not compromised.

The review also noted that Infrastructure Ontario's decision to terminate the employee was appropriate. This was based on the employee being implicated in the York University false invoicing scheme. However, Infrastructure Ontario's then CEO failed to consult with or inform Infrastructure Ontario's board of directors and audit committee of the circumstances of the employee's termination and also failed to note them in the employee's file. This resulted in two Infrastructure Ontario employees unwittingly providing positive references for the employee, who then obtained employment at St. Michael's Hospital.

Status of Actions Taken on Recommendations

Infrastructure Ontario has made progress on a number of our recommendations, including updating the evaluation threshold for AFP project delivery to $100 million, changing the process to incentivize project companies to complete minor deficiencies within the agreed-to period, and providing training and updates on its centralized database system to improve the completeness and accuracy of information on AFP projects.

However, some areas that still require work include gathering empirical data to support the valuation of risks in the value-for-money assessment used to justify the AFP approach, and ensuring that risks assumed to be transferred in the value-for-money assessments are reflected in the project agreements.

The status of the actions taken on each recommendation is described in the following sections.

Value-for-Money (VFM) Assessment

Recommendation 1

Infrastructure Ontario should, in conjunction with the Ministry of Economic Development, Employment and Infrastructure, gather data on actual cost experience from recent public-sector infrastructure procurements and alternative financing and procurements (AFPs) and revise its VFM assessment methodology to ensure that the valuation of risks assumed to be retained under both the AFP and public-sector delivery models are well justified.

Status: In the process of being implemented by March 2017.

Details

A key component of Infrastructure Ontario's VFM assessment is the valuation and assignment of risks retained under both the AFP and public-sector delivery models. For the projects we reviewed, it was only Infrastructure Ontario's costing of the risks and the impact of allocating them between the two delivery models that tipped the balance in favour of AFP over public-sector project delivery. In our 2014 audit, we noted that there was no empirical data to support those risk valuations and that Infrastructure Ontario's reliance on the judgment of external advisers made them difficult to verify.

Since our audit, Infrastructure Ontario has been able to access the recent actual costs only of the projects it manages under the Province's real estate portfolio. Beginning in 2015, Infrastructure Ontario included in its annual reporting of the track record for AFP projects the performance on traditionally delivered capital projects valued between $10 and $50 million that were delivered in 2013/14 and 2014/15 by its Real Estate Services division. These were found to be 71% on budget and 86% on time. AFP projects were found to be 98% on budget and 73% on time.

Infrastructure Ontario did hire a cost consultant in September 2015 to review five major hospital projects (with capital costs over $100 million) that had been traditionally delivered 10 years ago. The

consultant's report found that in comparing tender cost to final cost, the cost overruns for these five hospital projects ranged from 5.0% to 95.5%, with three of the projects under 10%, one at 35% due to environmental issues and other costs, and one at 95.5% due to lack of controls, insufficient resources and inexperience on large capital projects. Infrastructure Ontario has used these findings to justify estimating cost overruns at approximately 15% to 25% in its risk assessment for projects delivered under the traditional approach.

In addition, Infrastructure Ontario engaged another consulting firm to update the risk matrix for highway/transit projects in April 2015. However, this update did not rely on any empirical data, as the consultant's report stated, "there is no single comprehensive data base of public or private projects that could be identified or relied upon for the estimation of risk."

Infrastructure Ontario also used as further evidence to support its risk valuations a City of Toronto Staff Report on the Toronto-York Spadina Subway Extension, which noted that the project was over budget by as much as 21%.

In summer 2015, the Treasury Board/Management Board of Cabinet issued a new "Major Public Infrastructure Projects" directive that establishes the approval process and reporting requirements for large infrastructure projects in the province. Under this directive, ministries will start to report quarterly on the status of major projects including those that are delivered using either traditional or the Alternative Financing Procurement model by the end of 2016/17. We will continue to monitor the status of this initiative to collect comparable data on traditionally delivered and AFP projects.

Infrastructure Ontario indicated that it would like to migrate to a more business case approach from the current value-for-money assessments used to evaluate the suitability of projects for AFP delivery. In order to implement the new approach, it will need to work with the Treasury Board Secretariat, the Ministry of Infrastructure and other stakeholder ministries. It expects to start this process early 2017 and make recommendations to its board of directors by summer 2017.

Recommendation 2

To ensure that value-for-money assessments in procuring large-scale infrastructure projects are valid and objective, Infrastructure Ontario should confirm:

- *that all risks assumed to be transferred to the AFP contractor are supported by relevant provisions of the project agreement; and*

  Status: In the process of being implemented by December 2016.

Details

In our 2014 audit, we found a number of inconsistencies between the risks assumed to have been transferred to the private sector in Infrastructure Ontario's VFM assessments and their respective project agreements. Although Infrastructure Ontario has since updated its VFM assessment to consolidate and eliminate some redundant risks, we continue to see some risks that the assessments assumed to have been transferred to the AFP contractor but for which the contractor and province in fact continue to share or be responsible for the costs according to the project agreements.

For example, in our review of VFM assessments in 2014, we noted that a risk associated with permit approvals was considered to have been transferred to the AFP contractor; however, in the agreement it was shared between the contractor and the project owner. This remains the case in the updated VFM assessment and current project agreement.

On the same basis, the VFM assessments for Build Finance projects continue to assume that the risk of design errors is transferred to the AFP contractor, but according to the project agreement, this risk remains with the project owner.

At the time of our follow-up, Infrastructure Ontario was planning to amend the VFM assessments to align with the provisions in the project agreements for the two risk areas that we identified. Infrastructure Ontario was also expecting to

amend the risk templates for all new projects by December 2016.

- *that the costs assigned to retained risks in the public-sector comparator are not accounted for elsewhere in the assessments.*
  Status: Fully implemented.

Details

We identified in our 2014 audit two specific risks in Infrastructure Ontario's risk assessments whose costs accounted for one-third of the value in retained risks for the public-sector comparator that should not have been included.

The first was the "asset residual risk" being double counted for AFP projects with a maintenance component. Specifically, in addition to including a cost of nearly $3 billion in retained risk on the public-sector side in its VFM assessments, Infrastructure Ontario also assumed a base cost on the public-sector side for maintaining projects and replacing their major components in the same amount and timing as in the base cost on the AFP side. Under this situation, there should not be any difference in the condition of assets between the two procurement approaches and hence there should be no need for an additional public-sector comparator cost related to "asset residual" risk.

The second was the "planning, process and allocation practices" risk associated with delays caused by internal government approvals, which would be equally applicable under both delivery models, so there should be no difference in the risk under either model.

Infrastructure Ontario's update to its VFM assessment in 2014/15 reduced the amount of lifecycle costs by 40% under the public-sector comparator to recognize the historically observed under-spending by the Province. The asset residual risk also reflects the condition of the Province's real estate portfolio based on the amount of lifecycle spending by the Province. On average, the buildings in this portfolio have a Facility Condition Index (FCI = value of deferred maintenance/replacement value of the asset) of 18% by the time they are 30 years old. Infrastructure Ontario indicated that it typically assumes that traditionally delivered projects will have an FCI of approximately 20% as part of the value-for-money assessment.

In March 2015 Infrastructure Ontario also revised the probability and impact associated with the "planning, process and allocation practices" risk in its VFM risk matrix for both delivery models, in effect making this risk equally applicable under both models in the case of the civil projects (e.g., highway and transit projects) and significantly reducing the difference between the two models for social infrastructure projects (e.g., hospital projects). This risk has also been renamed "government approvals for program" as part of the update to provide clarity on the various risks in the assessment.

Infrastructure Ontario should also confirm that the threshold for what is considered a large-scale project is useful in screening projects that should be procured using the AFP approach versus the public sector delivering the project.

Status: Fully implemented.

Details

The Ministry of Infrastructure, in co-operation with Infrastructure Ontario, undertook a review of the screening threshold for AFP projects to determine whether an increase to the $50 million threshold was necessary. In spring 2015, the government announced that it will be moving to a new $100 million threshold to identify projects to assess for delivery through AFP. This new threshold is in line with thresholds for public–private partnership projects in other Canadian jurisdictions.

The government will assess complex projects under $100 million on a case-by-case basis for AFP delivery.

Recommendation 3

Infrastructure Ontario should ensure that all proposed changes to its VFM assessment methodology,

including its plan to increase the base cost on the public-sector comparator side by up to 13.3% to reflect value-added innovations that the private sector may be bringing to projects, can be and are fully supported and can sustain scrutiny.

Status: Little or no progress.

Details

At the time of our audit in 2014, Infrastructure Ontario had proposed a number of changes to its methodology for future VFM assessments. See **Figure 1** for the proposed and subsequent changes made.

Regarding the adjustment to reflect value-added innovations that the private sector may be bringing to projects, Infrastructure Ontario hired two consulting firms to review its AFP projects. Both firms surveyed and interviewed external companies involved in the delivery of infrastructure projects; one of the firms compared the winning bid to the average of all the bids for AFP projects.

Both firms concluded that the winning bidders were able to submit a lower-price bid by providing a design with reduced project area that could provide the same performance as defined in the

Figure 1: Changes to Infrastructure Ontario's Methodology for VFM Assessments

Source of data: Infrastructure Ontario

	Proposed Change in 2014	Actual Change Subsequent to Our 2014 Audit	Support for the Change
1.	Increase the base cost on the public-sector side by up to 13.3% to reflect value-added innovations that the private sector brings to projects that are not realized under public-sector procurement.	Included an innovation factor by increasing the base cost on the public sector side by 7.5% for Design Build Finance projects and 12% for Design Build Finance Maintain projects in the VFM assessment.	This adjustment was based on a comparison of the winning bid and the average of all the bids for the projects, as well as surveys and interviews conducted by two cost-consulting firms.
2.	Vary the percentage of the payment when a project's construction is substantially complete to optimize financing costs and ensure that the contractor has sufficient "skin in the game."	Increased the substantial completion payment from 50% to 60% on social infrastructure projects (e.g., hospitals, courthouses) and up to 85% for civil projects (e.g., highways, transit). Introduced "progress payments" on large Design Build Finance Maintain projects.	These adjustments were based on a review of past projects and comparison of the cost of public financing versus private financing. They are intended to manage the financing costs of AFP projects while still ensuring that there is effective risk transfer.
3.	Reduce the estimate of the risk premium on the AFP side from 5% to 10% of the base cost depending on the type of project to 0% to 6%.	Removed the risk premium adjustment on the AFP side of the VFM assessment.	Infrastructure Ontario provided no support for the removal of the risk premium from the VFM assessment on the AFP side apart from indicating that it was done as part of the review of the innovation factor adjustment.
4.	Exclude insurance premiums in the competitive neutrality adjustment on the public-sector comparator to avoid the double-counting of this cost.	Excluded insurance premiums from the competitive neutrality adjustment.	Adjustment recommended by our 2014 audit to avoid the double-counting of this cost.
5.	Consolidate the number of risks considered and assign new risk probabilities and impact to reflect Infrastructure Ontario's experience gained to date on the delivery of AFPs.	Reduced the number of risks in the VFM assessment from 60 to 40 and adjusted risk probabilities and impact where necessary.	The risk matrix for each asset class and delivery model was reviewed and a number of risks consolidated to reflect AFP project experience and risk allocation. However, new risk probabilities and impacts were not based on actual empirical data from traditional builds.

output specifications, or by providing a shorter construction schedule in some cases, and that these were deemed to be innovations that the bidders incorporated into their designs.

We continue to question whether the differences in bid prices are a good proxy for the innovation adjustment, as lower bids could be due to a number of other factors, such as idle capacity that a project company wishes to deploy and hence lowers its costs.

In addition, Infrastructure Ontario removed the 5% to 10% risk premium on the AFP side. However, it did not provide any support to justify this change.

As a result, the inclusion of the innovation adjustment of 7.5% to 12% to the public-sector-comparator side, combined with the removal of the risk premium of 5% to 10% on the AFP side, results in an actual adjustment of 12.5% to 22% in favour of the AFP delivery model.

Lastly, in adjusting risk probabilities and impacts, Infrastructure Ontario has not included the extent to which the adjustments are based on actual empirical data on traditional builds.

Recommendation 4

The Ministry of Economic Development, Employment and Infrastructure should also engage Infrastructure Ontario in traditional forms of procurement that utilize the experience that the agency has gained in delivering AFPs, for the most part, on time and on budget, in order to achieve cost benefits and to be consistent with the government's June 2011 strategic framework to guide investments in infrastructure in the province.

Status: Little or no progress.

Details

A January 2016 letter from the Ministry of Infrastructure noted that a review of Infrastructure Ontario's mandate under the new Agencies and Appointments Directive is scheduled to take place in 2016/17. This review will play a critical role in helping to ensure that the activities of Infrastructure Ontario are current and appropriately align with the government's policy objectives and priorities.

Procurement of AFP Contractor

Recommendation 5

In order to have a good estimate of project costs before seeking Treasury Board approval, as well as to better evaluate the reasonableness of future bids, Infrastructure Ontario should identify the reasons for the significant differences between actual contract values and its estimates of project cost, especially for projects that have long-term financing, maintenance and lifecycle costs. Infrastructure Ontario should accordingly review and update its process for arriving at these estimates.

Status: In the process of being implemented by winter 2017.

Details

In our 2014 audit we noted that there was a significant difference between the initial budgets approved for the projects and the actual contract value at financial close. We found that for 56 projects that were either substantially complete or under construction at the time of our audit, the contract value was about $12 billion (27%) lower than the initial budget. The majority of the difference was from long-term financing, lifecycle and maintenance costs. Overall, this variance indicated that Infrastructure Ontario's budgeting practices were not accurately estimating these longer-term costs of AFP projects.

Since our audit, Infrastructure Ontario has undertaken an analysis of budget trends from 2007 to 2015 for AFP projects to identify the reasons for differences between actual contract values and its estimates of project costs. It found that very conservative approaches were used in the initial AFP projects to compensate for the lack of industry familiarity and lack of good-quality data for AFP lifecycle and maintenance-cost estimates. The analysis showed improvement in the budget estimates over time with increasing industry familiarity as well as increased use of project data.

In addition, Infrastructure Ontario retained a cost-consulting firm to review its methodology in developing AFP project budgets. The final report

released in March 2016 found that while Infrastructure Ontario's methodology for producing budgets follows a process consistent with industry practice, there were some areas for improvements, including the following:

- Infrastructure Ontario appears to treat each project uniquely and does not apply standard percentage mark-ups for the various categories of costs across all projects. The consultant recommended that Infrastructure Ontario should continue to consider each project on its own initially and then compare it to benchmarks as part of its due diligence. This is a critical component of establishing reasonable budgets.
- Although the Social Design Build Finance Maintain (DBFM) portfolio (including, for example, hospitals and courthouses) appears to perform well, there is room for improvement with the Civil DBFM portfolio (including, for example, highways and transit), with only two out of the five project budgets in that portfolio meeting industry standards.
- Infrastructure Ontario should continue to track trends and make adjustments to the assumptions for projects currently in the transaction phase, working with data from completed projects to further refine its budgeting process.

In response to the concerns identified in the report, Infrastructure Ontario is setting up a new project database. The database will allow greater analysis and reporting on individual projects and sectors for comparative purposes. This will be useful information for developing project budgets. Infrastructure Ontario anticipates this system will be implemented in the spring or summer of 2017. In addition, the budget and cost management team was restructured in 2016. The resources needed to improve the budget performance for the Civil DBFM portfolio were identified. These included bringing in a Quantitative Surveyor or Analyst, expected to be hired in the fall or winter of 2016, and a new Cost Consultant Vendor of Record, expected to be developed in winter 2017.

Evaluation of Bidders for AFP Projects

Recommendation 6

Infrastructure Ontario should review and update its system of scoring bidders' submissions to ensure that due consideration is afforded to both the technical merits of the submissions and to price.

Status: Fully implemented.

Details

In our 2014 audit we noted that Infrastructure Ontario's scoring system for evaluating bids gave the lowest bidder a decided edge, which often resulted in the strength of the submissions' technical aspects not being a significant factor. We noted a number of projects that were awarded to the lowest bidder, which in some cases had met only the minimum technical-design requirements for the project.

Following our audit, Infrastructure Ontario undertook a review of its evaluation methodology and concluded that changes to its scoring system were not necessary, as the current process requires all bidders to meet not only stringent qualification standards but also minimum design-technical requirements, which are of a high standard. However, Infrastructure Ontario introduced a number of other changes subsequent to its review, including the following:

- a sequential evaluation of requests for proposals, whereby technical results are now completely evaluated before any financial submissions are opened (in the past this was done simultaneously by the technical and financial evaluation teams);
- a minimum scoring threshold for technical submissions for Build Finance projects to ensure that certain construction standards, primarily dealing with scheduling, are met; and

- development of formal evaluation frameworks to describe and outline the evaluation process, which will be used to select the preferred bid for projects.

Recommendation 7

Infrastructure Ontario should ensure that participants involved in evaluating the submissions sign the required conflict of interest declaration that discloses any relationships with entities identified in the submissions.

Status: In the process of being implemented by spring 2017.

Details

It is important to ensure that all participants involved in the procurement of a project have declared all situations that could impact their objectivity in the evaluation processes. During our 2014 audit, Infrastructure Ontario was unable to provide us with signed conflict-of-interest declarations for a number of the participants involved in the evaluation of request for qualifications (RFQ) and request for proposals (RFP) submissions. In our follow-up work we also noted that Infrastructure Ontario still did not have signed conflict-of-interest declarations from all participants involved in evaluating the RFQs and RFPs submitted subsequent to our 2014 audit.

Since our 2014 audit, Infrastructure Ontario has established a Conflict Review Team (accountable to Infrastructure Ontario's General Counsel) whose role is to ensure that all participants in the evaluation process are clear of any disclosed conflicts of interest and that any perceived, potential or actual conflicts of interest are adequately managed and mitigated.

Infrastructure Ontario has also made a number of changes to its record-management process since our audit, including transferring the responsibility for record-management from the Procurement department to the General Counsel's Office and developing a close-out checklist to ensure the necessary digital and physical storage of all related paperwork is maintained.

To improve its record-keeping process, Infrastructure Ontario has entered into a contract with a third-party service provider to pilot an electronic evaluation system, including creating an audit trail of the conflict-of-interest check-in and compliance. The effective date of the agreement was April 27, 2016, and Infrastructure Ontario expects to pilot the system on an AFP project in the spring of 2017.

Recommendation 8

Consistent with the March 2012 letter from the Minister of Economic Development, Employment and Infrastructure, Infrastructure Ontario should develop a formal process for managing the intellectual property rights acquired in exchange for the bid fees paid to unsuccessful bidders to ensure that the province receives any benefits from these rights in planning new projects.

Status: Fully implemented.

Details

As noted in the Framework for the Development and Delivery of Alternative Financing and Procurement Projects issued in June 2016 by the Ministry of Infrastructure, Infrastructure Ontario continues to be responsible for managing the intellectual property rights acquired in exchange for the design bid fees paid to unsuccessful bidders.

Since our audit in 2014, Infrastructure Ontario has centralized all electronic design submissions in its document management system, and project teams can now access them to inform the planning of future projects.

Monitoring of AFP Projects

Recommendation 9

Infrastructure Ontario should review the amount of the payments that it holds back at substantial completion of the projects it delivers to help ensure that minor deficiencies are corrected on a timely basis.

Status: Fully implemented.

Details

AFP agreements typically require minor deficiencies to be rectified within 45 to 120 days after reaching substantial completion. However, in our 2014 audit we observed that the average time to resolve such deficiencies was close to 13 months and, in two cases, hospital projects had not reached final close three years after substantial completion because all minor deficiencies had not yet been resolved.

Since our audit, Infrastructure Ontario has reviewed the holdback amount as well the methodology for calculating and paying it out. After its review it proposed a number of changes to the project agreements to incentivize the private sector to rectify minor deficiencies in a timely manner. These include the following:

- Changing the methodology for calculating the amount to be held back for minor deficiencies to hold back more money—Historically, the holdback was calculated at 200% of the project company's estimate of the cost to complete the work. Now this calculation is based on 200% of the Independent Certifier's estimate of what it would cost if Infrastructure Ontario or the project sponsor had to complete the work.
- No progress payments to the project company for completed minor deficiencies—No minor deficiency holdback monies will be released until all minor deficiencies, including seasonal work, are rectified as certified by the Independent Certifier/Consultant.
- Removal of the contingency of 30/75 days post-expiration of the minor deficiency rectification period—This effectively limits the project company's cure period solely to the time period established in the project agreements of 45 days for Design Build Finance and Design Build Finance Maintain projects, and 120 days for Build Finance projects, or as otherwise established by the Independent Certifier at the project's substantial completion. This permits the province to step in immediately after rectification periods have expired to complete the deficiencies using the holdback funds.

These proposals were adopted in principle for all in-market and future projects in February 2016. At the time of our follow-up in August 2016, Infrastructure Ontario had implemented these new proposals in its six projects currently on the market.

Recommendation 10

In order to properly monitor the construction phase of projects, Infrastructure Ontario should ensure that information on individual projects is stored in a centralized database using a consistent structure and that its construction status reports are accurate and complete.

Status: Fully implemented.

Details

Infrastructure Ontario produces a monthly construction status report for each project. In our 2014 audit we noted instances of incorrect or incomplete reports. For example, in some of the reports the budgeted costs for the projects did not agree with their most recent budgets, and the list of change orders related to certain projects was not complete. We also noted that information on projects was stored in multiple locations or databases, including staff personal computers and emails. There was no consistent structure or centralized database for this information. This created a real risk of a loss of knowledge on projects if a staff person responsible for monitoring a project were to leave the agency.

In the fall of 2014, Infrastructure Ontario made a number of modifications to its centralized database system to make it more user-friendly and comprehensive for staff use. Training on the use of the system and reporting templates have been provided to all staff following these modifications:

- expanding the functionality of the system to capture projects in the pre-transaction phase that is before the request for proposal stage, allowing for more complete project status information in the system (in the past,

projects were only added to the centralized database when they reached the request for proposal stage);

- automating transaction reports and claims processes in the system to ensure easy transition of project information and tracking from the transaction phase to the construction phase; and
- enhancing the "help" function for the Risk Register and Project Status Update processes to provide clarification to users when needed.

As well, to ensure the completeness and accuracy of the information being reported, Infrastructure Ontario undertook a review of the data in its Construction Status Reports and worked with project teams to align all budget, contingency and variation information back to source documents. As of August 2016, this review had been completed for 34 AFP projects.

In July 2016 Infrastructure Ontario established a new Project Management team inside its Major Projects Division. This team is responsible for ensuring the completeness of the information reported in the system and the consistent use of the system. Where missing information or non-compliance is identified, the appropriate project team is to be notified so that it may rectify the issue.

Ministry of Infrastructure (formerly the Ministry of Economic Development, Employment and Infrastructure

Infrastructure Ontario's Loans Program

Follow-Up on VFM Section 3.06, *2014 Annual Report*

RECOMMENDATION STATUS OVERVIEW					
	# of	Status of Actions Recommended			
	Actions Recommended	Fully Implemented	In Process of Being Implemented	Little or No Progress	Will Not Be Implemented
Recommendation 1	1	1			
Recommendation 2	1	1			
Recommendation 3	1	1			
Total	**3**	**3**	**0**	**0**	**0**
%	**100**	**100**	**0**	**0**	**0**

Background

Ontario Infrastructure and Lands Corporation, commonly referred to as Infrastructure Ontario, is a Crown corporation established by the *Ontario Infrastructure and Lands Corporation Act, 2011* (Act). Infrastructure Ontario is governed by a board of directors that is appointed by the Lieutenant Governor in Council and accountable to the Minister of Infrastructure (at the time of our audit in 2014, the Minister of Economic Development, Employment and Infrastructure).

Infrastructure Ontario has four main lines of business that deal with both government and non-government clients: Major Projects—managing large, complex public infrastructure projects through the alternative financing and procurement model; Real Estate Services—managing the Province's real estate and lands portfolio; Infrastructure Lending—administering the Loans Program; and Commercial Projects—leveraging private-sector partnerships and investments for efficiency in government services and investments.

Through the Loans Program, Infrastructure Ontario has been lending money to municipalities, the broader public sector and the not-for-profit sector in Ontario for the development of infrastructure. Infrastructure Ontario's Loans Program employs 26 full-time-equivalent staff, including loan officers, commercial underwriters, client-relations personnel, credit risk analysts, project managers, treasury analysts and legal advisers. The Program's 2015/16 expenditures amounted to $7.1 million for salaries and administration costs.

Loans Program

The Loans Program had been lending infrastructure funds to municipalities under several other corporate structures before Infrastructure Ontario was created in 2011. In 2004, the Ontario Strategic Infrastructure Financing Authority (OSIFA) was formed to manage municipal loans formerly granted under the Ontario Municipal Economic Infrastructure Financing Authority (OMEIFA). OSIFA was established to expand the OMEIFA's mandate from one of lending strictly to Ontario municipalities to one that included borrowers in the broader public and not-for-profit sectors as well. Between 2006 and 2011, OSIFA and several other Crown agencies were amalgamated, ultimately creating the Ontario Infrastructure and Lands Corporation (referred to as Infrastructure Ontario throughout the report).

When OSIFA was formed and took over the Loans Program in 2004, it was administering a portfolio of approximately $514 million in municipal loans. Since then, the types of borrowers eligible for the Program have grown from solely municipalities to 10 eligible sectors. The eligible sectors, which are outlined in the Act and further detailed in Ontario Regulation 210/11 of the Act, are as follows:

- municipalities;
- universities and affiliated colleges;
- municipal corporations (including power generation and local energy-distribution companies and district energy corporations);
- local services boards;
- not-for-profit long-term-care homes and hospices;
- not-for-profit social and affordable housing providers;
- Aboriginal health access centres;
- community health and social services hubs;
- not-for-profit arts training institutes; and
- not-for-profit sports and recreation organizations.

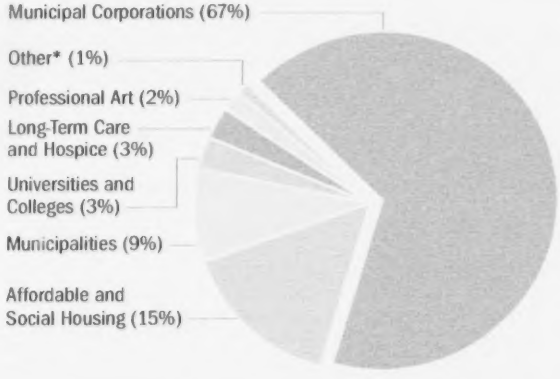
Entities that fall into one of the above sectors are eligible to borrow money from Infrastructure Ontario. In addition, certain other entities (such as the 2015 Pan American Games Organizing Committee and MaRS Discovery District) have been named eligible borrowers under the Act and its regulations.

The expansion of the Loans Program to the broader public and not-for-profit sectors has given borrowers who previously may not have had an external credit rating access to affordable financing through the province's high credit rating and low cost of capital. Under the Loans Program's expanded mandate, Infrastructure Ontario has a portfolio of 1,310 loans advanced to 379 borrowers, and it has approved loans totalling more than $7.7 billion since the inception of the Program. As of March 31, 2016, Infrastructure Ontario's balance of outstanding loans receivable totalled approximately $5.3 billion. **Figure 1** shows this balance by sector.

In managing credit risk for its portfolio—defined as "the potential for default or non-payments of loan principal and interest by borrowers of scheduled interest or principal repayments"—Infrastructure Ontario has developed a general credit risk policy as well as an individual credit risk policy/guideline for each of the 10 eligible borrowing

Figure 1: Total Outstanding Loan Advances by Eligible Sector, March 31, 2016

Source of data: Infrastructure Ontario



* Includes community health and social services hubs, Aboriginal health access centres, sports and recreation organizations, and local services boards.

sectors. Each sector policy/guideline outlines the sector's general credit strengths and risks, as well as common individual risks within the sector. The policies/guidelines also outline Infrastructure Ontario's maximum exposure limits for individual loans and for each sector overall, debt service coverage ratio limits for potential borrowers within the sector according to their risk class, and other sector-specific limitations.

Our 2014 audit found that Infrastructure Ontario needed to enhance its credit-risk assessment models (particularly for non-municipal borrowers), and update and strengthen its credit-risk policies. In addition, Infrastructure Ontario needed to formalize its loan-monitoring procedures, which were not well documented at the time of our audit. We found as well that Infrastructure Ontario should have a monitoring tool to track and monitor compliance with non-standard loan covenants within certain loan agreements.

Other significant observations from the 2014 audit included the following:

- Generally, Infrastructure Ontario had policies and procedures for lending and approval in place to ensure that loans to borrowers in the eligible sectors were made at terms commensurate with the associated risk. The vast majority of borrowers were making payments as required, and loan losses were historically quite low. However, the higher-risk loans were loans that did not fall into the eligible borrowing sectors but had been made eligible through other means in order to support the government's plans and priorities, such as support for the arts and for research and innovation.
- In one case, a loan for up to $235 million ($216 million was outstanding as of March 31, 2014) to a subsidiary of MaRS Discovery District, a not-for-profit organization that would not otherwise have been eligible for the Loans Program, was made possible by a regulatory amendment. The loan was to provide financing to complete the construction of a commercial office and research tower—which was to be built, owned and operated by a private-sector developer—after the developer was unable to secure financing to complete the construction. As part of the loan, the Ministry of Research, Innovation and Science (at the time of our audit in 2014, the Ministry of Research and Innovation) also provided a 15-year debt service guarantee for up to $7.1 million per year to cover the financial risk posed by the lack of committed tenants for the project.
- By December 2013, further difficulties on this project meant that the Ministry of Research and Innovation had to honour the guarantee it provided to facilitate the loan, as the amount of space leased out was not sufficient to support the loan-interest payments that were coming due in January 2014. Our audit noted that the lack of transparency around the policy objectives and intended benefits to be obtained in return for the significant risks assumed in providing the loan and guarantee created the perception of a bailout of a private-sector developer. We noted that it was still uncertain whether the benefits realized from this transaction will ultimately outweigh the risks and costs assumed.
- Also on the troubled loan list were two older loans made to not-for-profit organizations with a combined balance of approximately $75 million outstanding as of March 31, 2014. Both loans were approved based on optimistic assumptions about donation revenues that have not materialized to date. Approval by Order-in-Council was required for one of these borrowers to become eligible for the Loans Program. Neither borrower would have qualified for loans under Infrastructure Ontario lending policies regarding donation revenues that were in place at the time of our audit. Neither loan was in default at the time of the audit.

We made a number of recommendations for improvement and received commitments from Infrastructure Ontario that it would take action to address our recommendations.

Standing Committee on Public Accounts

On September 23, 2015, the Standing Committee on Public Accounts (Committee) held a public hearing on Section 3.06 of our *2014 Annual Report*, Infrastructure Ontario's Loans Program. Subsequent to the hearing, in October 2015, the Committee wrote a letter to the Ministry of Infrastructure (at the time, the Ministry of Economic Development, Employment and Infrastructure), endorsing the findings and recommendations in our report and acknowledging Infrastructure Ontario's responses to our recommendations and the additional information provided at the hearing. The Committee was satisfied with the information provided at the hearing and had no further recommendations.

Status of Actions Taken on Recommendations

Infrastructure Ontario has implemented all three recommendations in our *2014 Annual Report*, which were aimed at ensuring sufficient monitoring and tracking of the loans made under the Program.

For instance, with respect to the monitoring of loans, Infrastructure Ontario has revised its Credit Risk Management Policy by updating the individual credit risk policies (now called Sector Lending Guidelines and Procedures) for five eligible borrowing sectors covering most of its portfolio. In addition, Infrastructure Ontario also fully implemented 34 out of the 36 recommendations from an external review of its credit and lending processes, and implemented a new loan system that became operational in September 2014, where all non-standard loan covenants have been recorded in the system for tracking and monitoring.

The status of the actions taken on each recommendation is described in the following sections.

Municipal Loans

Recommendation 1

To ensure that outstanding municipal loans are effectively monitored, Infrastructure Ontario should formalize and document its monitoring procedures regarding municipal loans.

Status: Fully implemented.

Details

Infrastructure Ontario monitors municipal loans through an annual review of the municipalities' audited financial statements; through data collected in the annual Financial Information Return from the municipalities—the main tool for collecting financial and statistical information on municipalities—which is managed by the Ministry of Municipal Affairs and Housing (MMAH); and through discussions with MMAH, where appropriate. Infrastructure Ontario's Credit Risk Department uses the annual review to identify borrowers with low credit scores and assess any potential impact this may have on debt repayment.

Our 2014 audit noted that although Infrastructure Ontario had sufficient procedures in place to monitor municipal loans, they could be better documented.

Since our audit, Infrastructure Ontario in September 2015 updated its Credit Risk Management Policy and its Sector Lending Guidelines and Procedures for municipalities, which document the monitoring procedures for municipal loans. The Credit Risk Management Policy now defines Infrastructure Ontario's responsibility for ensuring appropriate credit management planning and risk measurement, and for monitoring and reporting on existing and potential credit risks and environmental risks in its portfolio of loans.

The updated Sector Lending Guidelines and Procedures for municipalities now has a section dedicated to analysis and due diligence required for municipal loans, and lists specific areas such as the mandatory completion of the Municipal Scoring Model that should be checked against Infrastructure Ontario's minimum requirements. Infrastructure

Ontario will actively monitor municipalities that *score below these minimum requirements* to understand the causes contributing to their drop in creditworthiness and how to best address these.

Review of Infrastructure Ontario's Credit and Lending Review Process

Recommendation 2

To ensure that loans issued to eligible borrowers reflect the associated risks, and that outstanding loans are effectively monitored, Infrastructure Ontario should implement all components of its action plan to address the deficiencies identified in the 2013 consultant's review of its credit and lending processes.

Status: Fully Implemented.

Details

In June 2013, Infrastructure Ontario hired an external consulting firm to conduct a review of its lending and credit review processes. The review had 36 recommendations, including:

- refining the Credit Risk Policy to be more prescriptive and to cover all relevant loan processes;
- enhancing existing policies and procedures to facilitate the consistent use of underwriting and credit assessment;
- establishing a minimum global debt service coverage ratio requirement;
- formalizing the current monitoring process to identify potential problem accounts in a systematic way; and
- implementing an annual loan review process.

In March 2014, Infrastructure Ontario management presented an implementation plan to address all 36 of the report's recommendations to its board of directors, with an April–September 2014 timeline.

Since our 2014 audit, Infrastructure Ontario has fully implemented 34 of the recommendations through the updates to its Credit Risk Management Policy and its Lending Guidelines and Procedures.

Infrastructure Ontario will not be implementing the other two remaining recommendations, relating to adjusting the loan interest rate in relation to borrower creditworthiness and incorporating additional information and conditions on the borrowing rate within the Term Sheet. This is because the vast majority of borrowers are making their payments as required, and loan losses have been historically low.

Recommendation 3

To ensure all loan covenants are being monitored and appropriate action is taken when associated risks warrant it, Infrastructure Ontario should develop a tracking tool to record and monitor all non-standard covenants that are included in signed loan agreements.

Status: Fully implemented.

Details

Infrastructure Ontario's Credit Risk department is responsible for credit application review and loan monitoring. At the time of our audit in 2014, the department was in the process of developing and refining a number of loan-monitoring tools and other reporting tools, but its loan-monitoring policies and procedure were still informal. In addition, our audit found a number of instances where non-standard restrictions or covenants had been included in loan-financing agreements to address specific risk areas. However, we did not see evidence that Infrastructure Ontario was monitoring compliance with these covenants.

Since our audit in 2014, Infrastructure Ontario has implemented a new loan system that became operational in September 2014 with the functionality to track and monitor loan covenants. All non-standard covenants in the loan agreements have been entered into the system, and reports are generated weekly for the loan officers to monitor the due dates for the submission of the necessary information to assess compliance with the covenants. Loans with covenant breaches are identified for further follow-up and are reported quarterly to senior management and the board of directors. As of March 31, 2016, there were six loans ($108 million) on the Loan Watch List identified for further monitoring.

MaRS Phase 2 Inc. Loan Update

In May 2010, the Credit and Risk Management Committee of Infrastructure Ontario's board approved a loan for up to $235 million ($216 million was outstanding as of March 31, 2014) to a subsidiary of MaRS Discovery District, a not-for-profit organization that would not otherwise have been eligible for the Loans Program. The loan was made possible by a regulatory amendment. Its purpose was to provide financing to complete the construction of a commercial office and research tower—which was to be built, owned and operated by a private-sector developer—after the developer was unable to secure financing to complete the construction. Infrastructure Ontario approved the loan with a debt service guarantee from the Ministry of Research and Innovation in lieu of a condition requiring 80% of the building to be pre-leased, which Infrastructure Ontario required the developer to meet before any funds could be advanced on the loan. This guarantee transferred the loan default risk from Infrastructure Ontario's Loans Program to the Ministry.

In December 2013, the construction of the tower was completed and an occupancy permit was issued; however, only just over 30% of the space available had been leased. As well, MaRS Discovery District did not have the required funds to service lease commitments it had made and the interest payments on the loan. On February 3, 2014, Infrastructure Ontario notified the Ministry of Research and Innovation that it would be requesting a draw on the debt service guarantee to service the loan. At the same time, the Minister of Infrastructure also asked Infrastructure Ontario to explore options to preserve both the project and the loan while reducing the government's exposure.

Negotiations with stakeholders continued through August 2014, and a conditional agreement to buy out the developer's residual interest was announced in September 2014. The loan was also converted from a construction loan to a long-term debenture on September 30, 2014. Total draws on the guarantee from February 2014 to January 2015 were $7.9 million.

Our audit noted that the lack of transparency around the policy objectives and intended benefits to be obtained in return for the significant risks assumed in providing the loan and guarantee created the perception of a bailout of a private-sector developer. We noted that it was still uncertain whether the benefits realized from this transaction will ultimately outweigh the risks and costs assumed.

Since our audit, the MaRS debenture and financing agreement was assigned to and fully paid out by the Ministry of Research and Innovation, thus making Infrastructure Ontario whole.

An amended and restated credit agreement was signed between MaRS Discovery District, MaRS Phase 2 Inc. and the Province of Ontario on March 30, 2015, to cover the existing debenture of $223.3 million (comprised of $217.5 million from Infrastructure Ontario and $5.8 million drawn on the existing term facility immediately prior to the closing date) and to provide a new term facility up to $155 million. This new term facility is to be used to draw upon until 2019 to support the project until the building has enough tenants and cash flow for the project to stabilize. The Ministry has set up a number of measures to oversee this amended agreement. They include monitoring construction costs, appointing an expert supervisory committee and appointing an independent member to the MaRS board of directors.

As of March 31, 2016, the outstanding balance of the total credit facility is $290 million. This loan is reported in the Province's Public Accounts.

Ontario Energy Board—Natural Gas Regulation

Follow-Up on VFM Section 3.07, *2014 Annual Report*

RECOMMENDATION STATUS OVERVIEW					
	# of Actions Recommended	Status of Actions Recommended			
		Fully Implemented	In Process of Being Implemented	Little or No Progress	Will Not Be Implemented
Recommendation 1	4	1	3		
Recommendation 2	2	2			
Recommendation 3	2	1	1		
Recommendation 4	1		1		
Recommendation 5	1		1		
Recommendation 6	2		1	1	
Total	**12**	**4**	**7**	**1**	**0**
%	**100**	**33**	**58**	**9**	**0**

Background

The Ontario Energy Board (Board) is responsible for ensuring that natural gas market participants comply with the *Energy Consumer Protection Act, 2010* which pertains specifically to those selling to low-volume users, such as households. Under the *Ontario Energy Board Act, 1998* the Board's objectives include facilitating competition in the sale of gas to consumers and protecting the interests of consumers with respect to prices and the reliability and quality of gas services. In carrying out its mandate, the Board sets prices for natural gas and its delivery and storage. It also licenses and oversees natural gas market participants, including gas utilities and gas marketers.

In Ontario, residential consumers have the option of purchasing natural gas from either a gas utility or one of 12 gas marketers actively selling natural gas in Ontario. There are three utilities that own the pipes and equipment that deliver the natural gas to homes and businesses, plus two municipal utilities that also distribute natural gas. Each utility serves different areas of the province.

The Board regulates the rate that the three utilities charge their consumers, but not those that the gas marketers charge. The gas marketers operate as brokers, locating natural gas on the market to sell competitively. When consumers buy gas from marketers, they sign fixed-term contracts for periods of one to five years. Otherwise, they get their gas supply from their utility, which is the default supplier. For the year ended March 31, 2016, there

were 3.5 million natural gas customers in Ontario. Of these, over 3 million purchased their gas from one of the three utilities (these were the same numbers as we last reported for the year ended March 31, 2014).

The Board conducts its oversight through a quasi-judicial process that includes public participation. Panels of Board members hold proceedings and their decisions must uphold the broad public interest, including the protection of consumers, the financial integrity of the utilities, and other legislated goals, such as the safe operation of storage and energy conservation.

The Board uses a three-stage process in regulating natural gas rates. In the first stage, utilities must submit cost-of-service applications approximately every five years to establish the base rate to charge consumers. In the second stage, the Board reviews and adjusts gas rates annually between cost-of-service reviews, typically using a formula that considers inflation adjusted by the utilities' productivity figures. In the third stage, gas rates are adjusted four times a year to smooth out fluctuations in billing rates and to reflect current market prices for natural gas, as well as changes in transportation rates and inventory valuations.

Our 2014 audit found that the Board had adequate systems and processes in place to protect the interests of natural gas consumers and ensure that the natural gas sector provided energy at a reasonable cost. However, Board staff could more fully assess the cases utilities make when they apply to the Board for rate changes.

Some significant issues included the following:

- Gas utilities are not allowed to charge consumers more than the purchase cost of gas, but Board staff seldom obtained source documents to verify the information the utilities provided in rate change applications. We noted that in the preceding 10 years only one audit of gas cost adjustment accounts and accounting processes was done—in 2011—and on only one utility.
- Utilities applied different approaches to recover their Board-approved revenue requirements, but Board staff had not assessed the impact that these differences have on consumers.
- Although complaints against gas marketers decreased by 81% from 2009 to 2013, contract cancellation and renewal issues were still the sources of many complaints when consumers discovered they could pay lower prices with other gas providers. The Board could facilitate providing consumers with rate information from the various gas providers on its website to help them make more informed decisions before they entered into a contract.

In our *2014 Annual Report*, we recommended that the Board compare the different cost recovery approaches used by utilities and identify best practices in purchase, transport and storage of gas that could affect consumer rates; periodically select source documents from utilities for review to assess the reasonableness of the information on rate-change applications; and consider including on its public website information on the gas rates offered by various gas marketers.

We received commitment from the Board that it would take action to address our recommendations.

Status of Actions Taken on Recommendations

The Board provided us with information in the spring and summer of 2016 on the current status of our recommendations. According to this information, one-third of the actions we recommended in our *2014 Annual Report* had been fully implemented. For example, since our last audit, the Board had audited three natural gas utilities, including the two that supply 99% of the gas consumed in Ontario. During these audits, Board staff examined contracts and source documents related to gas purchase details and gas price adjustment accounts. As

well, another 58% of actions we recommended were in the process of being implemented; for instance, the Board was in the early stage of comparing the cost recovery approaches used by the two largest utilities, although they will not fully submit their base rate application until December 2017 for implementation by January 2019. The Board is also working toward publishing gas marketer prices and their price comparisons on a Board-supervised website, which is expected to be completed by June 2017. There has been little or no progress on the remaining recommendation we made. At the time of our follow-up, the Ministry of Energy had not tabled the Agency's annual report within the required legislative timeline.

The status of actions taken on each of our recommendations is described in the following sections.

Regulating Gas Utilities

Recommendation 1

To ensure that its regulatory decisions protect the interests of natural gas consumers and the public interest, and that the natural gas sector provides gas to consumers at a reasonable cost, the Ontario Energy Board should:

- *compare the different cost recovery approaches applied by the regulated utilities;*
  Status: In the process of being implemented by January 2019.

Details

Our 2014 audit noted that the two gas utilities that supply over 99% of the gas consumed in Ontario applied different approaches to recover their Board-approved revenue requirement. However, Board staff had not assessed the impact that these differences have on consumers.

During this follow-up, the Board was reviewing and updating the filing requirements for the next cost-of-service application process. The Board is also in the process of preparing a rate handbook to guide utilities, including natural gas utilities, on applications to the Board for rate approvals. The Board expects to issue the updated filing requirements and the rate handbook in Fall 2016. These documents will enable utilities to provide information that the Board needs to compare the cost recovery approaches they apply. However, the next cost-of-service applications do not occur until December 2017, so the Board will not conduct any detailed comparison of the cost recovery approaches until the applications are made at that time.

- *compare information submitted by the utilities and identify best practices in purchase, transport and storage of gas that could have an impact on consumer rates;*
  Status: In the process of being implemented by July 2017.

Details

Our 2014 audit found that, in their review of cost-of-service applications, Board staff did not sufficiently evaluate and compare differences in the information and practices of the two utilities that could have had an impact on consumers' gas bills, or that would help identify best practices. These included, for example, the different ways the utilities purchased, transported and stored gas.

Since our last audit, Board staff conducted two stakeholder consultations—one in December 2015 and another in March 2016—to further discuss and review the utilities' gas supply plans. During this process, staff compared the utilities' information on purchase, transport and storage of gas, but was unable to identify any areas of best practices for the utilities to consider because of the tradeoffs in different approaches. According to the Board staff, the consultations did lead to a better understanding of the risk and cost tradeoffs that the utilities considered when they developed their plans. After the first consultation, the two largest gas utilities prepared a side-by-side comparison of their respective gas supply plans.

In August 2016, Board staff issued a discussion paper on the existing approval and review processes for gas supply planning and recommended

the following changes to the processes for the Board to consider:

- Gas utilities should apply for pre-approval of their gas supply planning framework separate from rate applications.
- Gas utilities should submit the framework at the same time, and in the same format, to be reviewed jointly by the same Board panel.
- Separate from the gas supply planning framework, each gas utility should submit a gas supply memorandum annually that includes an evaluation of the performance of its gas supply plan over a six-year period—looking back three years as well as looking forward another three years. Similar to the preparation of the gas supply planning framework, gas utilities should use the same format and submit them at the same time. These requirements will enable the Board to compare the information simultaneously.

At the time of our follow-up, the Board was in the process of implementing the recommendations, with an expected completion date of July 2017.

- *implement any needed changes arising from its review of the quarterly gas rate adjustment process that it began in June 2014; and*
  Status: In the process of being implemented by July 2017.

Details

Following our audit fieldwork, in June 2014, the Board began a two-phase review of the quarterly rate adjustment mechanism for natural gas utilities to address any similar situations where consumer prices could be impacted significantly, such as during the record cold in the winter of 2013/14. The review took place in two phases:

- The first phase included a review of the process covering the filing requirements and supporting evidence for the application, events that would trigger a substantive review, and the required timelines for review and comments. This phase also involved a review of the Board's policy on smoothing rate increases for consumers and its protocols for communicating rate increases to consumers.
- The second phase included a review of the cost and risk trade-offs of the different utilities' gas supply planning approaches.

Based on the first phase of the review, which was completed in August 2014, the Board issued an Order (instruction), effective January 2015, that required gas utilities to calculate a preliminary estimate of the change in the commodity portion of residential consumers' bill one month before the normal quarterly rate adjustment mechanism filing date. Any anticipated decrease or increase of 25% or more on this portion of the bill would require advance notification by utilities to the Board and the customers who would be affected.

In October 2015, the Board initiated the second phase of the review and, in August 2016, Board staff proposed a number of recommendations for the Board to consider. As mentioned in the details under the second action of Recommendation 1, the Board was in the process of implementing the proposed recommendations, with expected completion by July 2017.

- *assess whether the settlement proposal represents an acceptable outcome from a public-interest perspective, and whether the accompanying explanation and rationale are adequate to support the settlement proposal.*
  Status: Fully implemented.

Details

In our 2014 report, we noted that the percentage of a utility's costs that the utility was permitted to recover through customer billings was determined in a settlement process involving the utility and intervenors. Board hearings are held only on issues where agreement has not been reached. However, we noted that there were no Board staff submissions commenting on whether the settlement proposals represented an acceptable outcome from a public interest perspective, and whether the accompanying explanation and rationale were adequate to support the settlement proposal.

In April 2014, the Board amended its Practice Direction on Settlement Conferences (Direction) to reflect the role of Board staff in representing the public interest by requiring that staff be active participants in settlement conferences and signatory to settlement proposals in some cases. The Direction now requires staff, when not a party to the settlement conference, to file a submission on whether any settlement proposal represents an acceptable outcome from a public interest perspective and whether the accompanying explanation and rationale is adequate to support the settlement proposal. During this follow-up, we reviewed all eight applications since April 2014, relating to natural gas for which there was a settlement conference and noted that the staff submission was included in each one and the submissions did not note any significant issues.

Additional Review Needed for Accuracy and Validity of Information Submitted to the Board

Recommendation 2

To ensure that information submitted to the Ontario Energy Board (Board) by the gas utilities that it regulates is accurate and valid and that consumers are being charged for only the actual costs incurred by utilities to purchase gas, Board staff should:

- *periodically select source documents from utilities for review, such as contracts, gas purchasing details and management reports, to assess the validity and reasonableness of utilities' application information; and*
- *periodically review price adjustment accounts and assess the appropriateness of items and entries included in these accounts.*

Status: Fully implemented.

Details

Our 2014 review of the quarterly gas rate adjustment application process noted that utilities provided different levels of support for their pricing requests and applied different approaches in arriving at the information they were required to submit. Also, Board staff seldom obtained source documents to determine whether the information in the applications was accurate and valid. As well, we noted that the two utilities that supplied over 99% of the gas consumed in Ontario had affiliated companies that also provided gas in other jurisdictions. Without sufficiently examining actual purchase records of these two utilities, the Board might not have taken sufficient care to protect Ontario consumers from the possibility that inappropriate charges were passed on to them.

In its 2016 response, the Board indicated that, during the 2014/15 and 2015/16 fiscal years, it had audited three natural gas utilities, including the two that supply 99% of the gas consumed in Ontario. To assess the validity and reasonableness of utilities' application information, Board staff examined contracts, gas purchasing details and management reports. They also reviewed and assessed the appropriateness of items and entries made to the price adjustment accounts.

Overall, the audits found that the utilities' natural gas purchase and recording processes, while very complex, appeared to appropriately capture the costs of natural gas, and charged these costs to customers in accordance with proper regulatory principles. However, the audit reports did note issues of potential non-compliance with regulatory filing requirements, inadequate documentation to support actions taken by the utilities and practices not consistent with the intent of Board decisions and orders. For instance, the Board identified that a utility used an incorrect methodology to calculate the forecast price used in its quarterly rate adjustment applications, which did not have a significant impact on gas charges to customers. For two of the largest utilities, the Board further commented that the utilities' internal audits had performed limited work on the gas cost adjustment account balances or the quarterly rate adjustment mechanism process for setting rates.

In October 2015, the Board performed a follow-up of a utility's audit completed in March 2015, to ensure that findings, including the issue noted above on the use of forecasting methodology, had been addressed. The Board was also planning to follow up on two other 2015 audits during the 2016/17 fiscal year. On an annual basis, Board staff prepares a risk-based audit assessment plan that is used to determine the timing and frequency of future audits.

Regulating Gas Marketers

Recommendation 3

To provide consumers with the information they need to make informed decisions in selecting a gas marketer and to protect consumers' interests, and to be in a position to assess consumer complaints regarding gas marketers, the Ontario Energy Board (Board) should:

- *consider including on its public website information on the gas rates offered by the various gas marketers for consumers to consult before entering into a contract; and*
  Status: In the process of being implemented by June 2017.

Details

In our 2014 report, we found that although the Board had, since 2010, received information from various natural gas marketers' on their contract rates, it had not published these rates for the public to see. Consumers who had such information would be able to make more informed decisions before entering into contracts. We also noted that regulatory bodies in other jurisdictions provide data on their websites on the rates charged by their gas marketers.

In May 2015, the Board issued a research report to the Minister of Energy, which included 14 recommendations to enhance consumer protection, one of which was to post prices and price comparisons on a Board-supervised website to improve consumer understanding and provide consumers with the information needed to make informed decisions about retail energy contracts. The report noted that other jurisdictions, including Texas, Pennsylvania, Ohio and New York, had websites where energy retailer prices were posted. The Board indicated that this initiative is expected to be completed by June 2017.

- *define the types of issues to be classified as consumer complaints for reporting purposes, so that the Board can compare the data on complaints it receives directly from consumers to the data on complaints that gas marketers report to the Board, in order to identify any anomalies and other areas of concern for further follow-up.*
  Status: Fully implemented.

Details

Even though gas marketers in Ontario are required to submit to the Board consumer complaints the gas marketers receive and address each quarter, our 2014 audit found that Board staff did not review this complaint data for trends or compare it against data on complaints received directly by the Board, which would help identify anomalies for further investigation. We compared the two sources of data and found significant anomalies in a number of complaints received. Board staff indicated that the anomalies occurred because the Board does not define what constitutes a complaint that must be reported to it, and each gas marketer uses a different definition.

In December 2014, the Board issued a bulletin to all gas marketers and clarified the definition of "consumer complaints" and said: "all low-volume consumer contacts that raise an issue or concern with an aspect of the supplier's operations, regardless of the supplier's internal process for classifying these contacts (e.g., complaint, contract, retention call and inquiry) are to be included in the number of consumer complaints" for reporting purposes. In this follow-up, we noted that the number of complaints received directly by the Board has decreased by 58%, from 506 complaints in fiscal 2013/14 to

210 in 2015/16. The number of complaints reported by gas marketers to the Board almost tripled, from 924 in 2013/14 to 2,590 in 2015/16. According to Board staff, the significant increase in complaints reported by gas marketers can be attributed to the December 2014 bulletin that clarified and broadened the definition of complaints. We also noted that the number of low-volume customers who purchased gas from gas marketers had decreased by 160,300, or 40%, from 404,000 in March 2014 to about 242,700 in March 2016. While the definition has been clarified and broadened, the Board relies more on the complaints received directly from the consumers in its analysis.

Monitoring Compliance and Enforcement

Recommendation 4

To more effectively oversee the regulated gas utilities in the interest of consumers, and to ensure the validity and accuracy of information they are required to provide to the Ontario Energy Board (Board) to protect the interests of consumers, the Board should conduct more frequent inspections and audits of the regulated utilities that supply more than 99% of the gas consumed in Ontario, especially in areas that significantly impact consumer rates, such as price adjustment accounts, purchasing processes and capital expenditures.

Status: In the process of being implemented by December 2018.

Details

The difference between what a utility forecasts it will have to pay for gas and what it actually pays is tracked by what are known as price adjustment accounts. These accounts are critical because gas purchase costs, as well as contracts for transportation of gas, are adjusted through them. In our 2014 report, we found that over a 10-year period, the Board had conducted only one audit—in 2011—of a utility's purchase gas variance account, and no other such reviews had been done for the other two regulated utilities.

During our follow-up, we found the Board had audited, during the 2014/15 and 2015/16 fiscal years, Ontario's three regulated natural gas utilities. The audits covered areas that significantly impact consumer rates, including price adjustment accounts and purchasing processes. However, we noted that these audits did not include a review of the capital expenditures. Although it is not an audit, the Board indicated that in the next cost of service application process it will assess variances between what the utilities planned for capital expenditures to what was actually completed, to help inform what is included into the rate base. For one of the audits completed in March 2015, the Board did a follow-up audit to ensure that findings from its previous audit had been addressed. The Board also plans to follow-up the audits of the other two utilities during the 2016/17 fiscal year. On an annual basis, Board staff prepares a risk-based audit assessment plan that is used to determine the timing and frequency of future audits. During this follow-up, we reviewed the 2016/17 plan and noted that in addition to the follow-up audits, the Board plans to review the internal processes of tracking, measuring, managing and analyzing the differences between the amount of gas purchased by each utility and the actual gas consumed by its customers (unaccounted for gas). These reviews are important to consumers because the cost of the unaccounted for gas is included in the gas distributor's base rate. The Board also plans to review the process of tracking and measuring of gas leakages for compliance with the regulation for greenhouse gas emission reporting that will come into effect on January 1, 2017.

Improvement Needed in Assessing Performance of Gas Utilities

Recommendation 5

To more effectively oversee the regulated gas utilities in the interest of consumers, the Ontario Energy

Board should establish additional gas-utility-specific performance measures needed to assess utility performance on an ongoing basis and to identify trends over time.

Status: In the process of being implemented by December 2018.

Details

In our 2014 report, we noted that the Board had only a few performance measures that focused on the quality of service that the gas utilities provide to their customers, and it had no performance measures for operational effectiveness, financial performance or public-policy responsiveness, as exist for the electricity sector.

At the time of our follow-up, we noted that one of the two major natural gas distributors had begun reporting on some additional performance metrics relating to operational effectiveness. The Board told us it intends to bring the natural gas sector in alignment with the Renewed Regulatory Framework for Electricity Distributors by introducing a performance-based approach, as well as measures against which performance is monitored. The Board also indicated that it intends to establish benchmarking requirements, asset management planning and customer engagement as part of utilities' filing requirements, as well as implement an initiative to broaden access to performance measurement information to all interested parties and consumers.

Monitoring the Board's Performance

Recommendation 6

To determine whether the Ontario Energy Board (Board) is achieving its mandated objectives, the Board should use available evaluation tools, including its Policy Evaluation Framework, and work with the Ministry of Energy to assess the effectiveness of its policies and initiatives in achieving desired outcomes and mandated objectives, including protection of consumer interests and facilitating competition in the sale of natural gas.

Status: In the process of being implemented by March 2019.

Details

In our 2014 audit, we noted that the Board had never used its Policy Evaluation Framework, which allows it to monitor and evaluate the effectiveness of its policies, for example, whether the Low-Income Energy Assistance Program has achieved its objectives. The *Ontario Energy Board Act, 1998* requires the Minister of Energy to table a report to the legislature every five years on how effective the Board has been in meeting its mandated objectives. However, no reviews of the Board's effectiveness had been conducted at the time of our last audit.

At the time of our follow-up, the Minister of Energy had still not requested a review of the Board's effectiveness. However, the Board had conducted a number of reviews and made the necessary changes to the policies and frameworks since our 2014 audit. Some of the reviews and changes are as follows:

- The Board completed a review of Part II of the *Energy Consumer Protection Act, 2010* (Act) and reported on its results in July 2015. The Board is in the process of making the necessary changes based on these results. The Act was introduced to ensure that low-volume (residential and small business) consumers have the information they need to make decisions about retail electricity and natural gas contracts, and that they have confidence that they are protected by fair business practices. While the review found that public support for the Act was high, it identified concerns, including that consumers had a hard time understanding their energy bills, so that the impact of energy choices was less clear to them and they had a harder time making accurate price comparisons. It also found that roughly one-third of current residential and non-residential contract holders who were surveyed were unaware that they had a retail

contract. The Board issued a set of recommendations to address these concerns.

- The Board's evaluation and assessment of the Low-Income Energy Assistance Program in 2014/15 concluded that a number of changes focusing on consumer interests were needed. For instance, the income measure used to determine eligibility for the program had not been updated since 1992 and needed to be reviewed and changed. Also, all adults in a household applying for assistance from the program had to attend an in-person interview to verify household income and personal information; this was viewed as onerous, and was changed so that only the account-holder was required to attend the interview. Based on the review, the changes were included as part of policy and code revisions in the fall of 2015.
- The Board plans to eventually apply the Renewed Regulatory Framework for Electricity, in an updated form, to natural gas utilities.
- The Board completed a review in 2016 of its cost-of-capital policy for all regulated utilities, including natural gas utilities. Based on this, Board staff determined that its methodology had worked as intended and had not resulted in excessive or anomalous volatility in the financial performance of utilities.
- In December 2014, the Board issued a Demand-Side Management Framework for Gas Utilities, developed to meet specific government objectives related to conservation. The utilities are required to develop demand-side management plans to cover six-year terms, coinciding with the time period in the Conservation First framework for electricity, developed by the Ontario Power Authority (now part of the Independent Electricity System Operator) and electricity distributors. The Board said this will encourage greater alignment, co-ordination and integration between the natural gas and electricity sectors' energy conservation efforts.

In addition, the Minister should table the Board's annual report within one month of receiving it, as required by law.

Status: Little or no progress.

Details

In our 2014 report, we noted that under the *Ontario Energy Board Act*, the Board is required to submit its annual report to the Minister of Energy within six months of the end of its fiscal year; then, within one month after receiving the annual report, the Minister of Energy must table the report before the Legislative Assembly. Once the tabling requirements are met, the Board is required to publish the annual report on its public website. We found that although the Board filed its 2011/12 and 2012/13 annual reports within the required time, the Minister did not table the reports within one month of receipt in the Legislative Assembly, as required by law, and therefore the reports were not posted on the Board's website until April 2014.

During our follow-up, we noted that both the 2013/14 and 2014/15 annual reports were posted on the Board's website as of March 31, 2016. However, neither report was tabled by the Minister of Energy within one month of receipt from the Board. In particular:

- the Board submitted its 2013/14 annual report to the Minister on September 29, 2014, but the Minister did not table it until April 7, 2015, which was more than six months after receipt; and
- the Board submitted its 2014/15 annual report to the Minister on October 22, 2015, which was three weeks past the six-month reporting requirement. The Minister however did not table the report for another three months, on January 28, 2016.

In Chapter 5 of our *2015 Annual Report* titled "Toward Better Accountability," we also noted that delays within Ministries mainly contributed to the delays in the tabling of Provincial agencies annual reports.

Chapter 1
Section
1.08

Ministry of Health and Long-Term Care

Palliative Care

Follow-Up on VFM Section 3.08, *2014 Annual Report*

RECOMMENDATION STATUS OVERVIEW					
	# of	Status of Actions Recommended			
	Actions Recommended	Fully Implemented	In Process of Being Implemented	Little or No Progress	Will Not Be Implemented
Recommendation 1	7		4	3	
Recommendation 2	1		1		
Recommendation 3	2		1	1	
Recommendation 4	1		1		
Recommendation 5	2		1	1	
Recommendation 6	2		1	1	
Recommendation 7	1			1	
Recommendation 8	1			1	
Recommendation 9	2		1	1	
Recommendation 10	1		1		
Recommendation 11	1		1		
Total	**21**	**0**	**12**	**9**	**0**
%	**100**	**0**	**57**	**43**	**0**

Background

The Ministry of Health and Long-Term Care (Ministry) has overall responsibility for health care in Ontario, including palliative care. Palliative care focuses on the relief of pain and other symptoms for patients with advanced illnesses, and is often referred to as "end-of-life" care for persons within their last few months of life.

The Ministry funds 14 Local Health Integration Networks (LHINs), which are responsible for planning, co-ordinating, funding and monitoring palliative-care services in their regions. The LHINs fund various organizations that provide palliative care, including Community Care Access Centres (which provide care in patients' homes), hospitals and hospices (which are home-like facilities that provide in-patient palliative care). However, in our 2014 audit we noted that the total amount of funding the Ministry provides for palliative-care services was not known because costs were not tracked

specifically enough to isolate the amount spent on palliative care (e.g., hospital-based costs, long-term care home-based costs and publicly funded drug costs).

We also noted in our 2014 audit that the need for palliative care was growing because the population was aging. Palliative-care services in Ontario developed in a patchwork fashion, often being initiated by individuals who had a passion for this area of care, wherever they were located in the province. As a result, although efforts had been made to create an integrated co-ordinated system to deliver palliative care in Ontario, no such system existed. The Ministry obtained only minimal information on the services that were available in each LHIN, their costs, and the relative patient need for these services. The Ministry also lacked performance measures to help determine its progress in meeting its goal of providing the "right care at the right time in the right place."

In our *2014 Annual Report*, we reported a number of significant issues, including the following:

- Ontario lacked a strategic policy framework for delivering palliative care. Although the 2011 Declaration of Partnership established a common vision for delivering palliative-care services among a number of stakeholders, significant work still needed to be done to meet most of the commitments outlined in it.
- There was little province-wide or LHIN-level information on the supply of or demand for palliative and end-of-life care. The Ministry did not have accurate information on the number of palliative-care beds in hospitals across the province, nor was the number of palliative patients served by each LHIN tracked consistently.
- The mix of services available had not been adequately assessed. Although most people would prefer to die at home, most died in hospital, likely because there were not sufficient services available in the community to meet their health-care needs. Caring for terminally ill patients in an acute-care hospital is estimated to cost over 40% more than providing care in a hospital-based palliative-care unit, more than double the cost of providing care in a hospice bed, and over 10 times more than providing at-home care.
- Access to palliative-care services was not equitable. Patients who qualified for services in one area of the province may not have had access to similar services in another area.
- Overall, hospices had a 20% vacancy rate and thus had the potential to serve more patients than they were. Meanwhile, the Ministry funded vacant beds in hospices.
- There was a need for additional physician communication with patients about their end-of-life prognosis and the availability of palliative care.
- Ontario's publicly funded palliative-care services were mainly used by cancer patients, even though as many people died each year from advanced chronic illnesses that would also benefit from palliative care, including heart disease, stroke and chronic obstructive pulmonary disease.

We made 11 recommendations with 21 action items for improvement and received commitments from the Ministry that it would take steps to address our concerns.

Status of Actions Taken on Recommendations

The Ministry provided us with information in the spring and summer of 2016 on the status of the recommendations we made in our *2014 Annual Report*. According to this information, we have determined that although the Ministry is in the process of implementing almost 60% of our recommendations, it has made little or no progress on approximately 40% of our recommendations and none have been fully implemented. The Ministry has indicated that many of the recommendations

are in the planning phase, with action to be taken within the next two to three years. For example, the Ministry is in the process of creating an overall palliative-care strategy and policy framework and took a significant step forward by establishing the Ontario Palliative Care Network (Network) in March 2016 to act as its principal adviser for the quality of palliative care in Ontario. The Network will be accountable for quality improvement initiatives, provide system level co-ordination, and support regional implementation of the strategy. The Ministry plans to address many of the recommendations through the Network as it begins to roll out the provincial strategy in 2016/17, including:

- implementing a co-ordinated system that will support more integrated delivery of palliative care through the development of regional palliative-care networks and strengthening partnerships between the different service providers; and
- assessing physician payments for palliative care to ensure that patients' needs are best met cost-effectively.

The status of each of our recommendations is as follows.

Strategic Policy Framework Not in Place for Palliative-Care Delivery System

Recommendation 1

The Ministry of Health and Long-Term Care, in conjunction with the Local Health Integration Networks, should create an overall policy framework on the provision of palliative-care services in Ontario.

Status: In the process of being implemented by June 2017.

Details

In November 2014, the Ministry of Health and Long-Term Care (Ministry) made a commitment to develop a comprehensive strategy for palliative and end-of-life care. The Ministry hosted 16 consultation sessions across the province from July 2015 to January 2016, with more than 300 stakeholders, including patients, families, physicians, health system leaders and experts in the field, to facilitate discussions about palliative and end-of-life care, including the aging population, system needs and challenges, and available options. As a result, the Palliative and End-Of-Life Care Provincial Roundtable Report was released in March 2016. The report outlined the first steps for strengthening the palliative and end-of-life care system and it summarized key themes, such as expanding equitable access and integration; strengthening service capacity; improving caregiver supports; enhancing public education and awareness; and establishing oversight and accountability.

The Ministry advised us that the palliative and end-of-life care strategy will build upon three key sources of information: the roundtable report, our 2014 audit report, and the 2011 Declaration of Partnership and Commitment to Action (a collaborative effort by more than 80 partners to identify key components of quality palliative and end-of-life care and establish a common vision for the delivery of those services in Ontario).

To co-ordinate activities on the strategy, in March 2016, the Ministry provided funding to Cancer Care Ontario to establish the Ontario Palliative Care Network (Network). The Network is made up of partner organizations, including the Local Health Integration Networks (LHINs), Cancer Care Ontario, Health Quality Ontario and community groups, such as the Quality Hospice Palliative Care Coalition of Ontario, long-term-care homes and not-for-profit organizations. The Network will also act as the principal adviser to the Ministry for the quality of palliative care; be accountable for quality improvement initiatives, data and performance measurement, and system level co-ordination; and support regional implementation of palliative care in Ontario.

While this strategy is under development, some first steps have been made to strengthen palliative and end-of-life care in Ontario. Specifically, as outlined in Ontario's 2016 budget, an additional

$75 million has been committed over the next three years to improve community-based hospice and palliative-care services by supporting up to 20 new hospices and increasing the funding for existing facilities. To date, funding has been provided for 31 new hospice beds, and base funding for hospices has been increased by $3 million for eight of the LHINs. The additional funding announced is also to increase supports for caregivers to help families and loved ones support palliative patients at home and in the community, and to promote advance care planning so families and health-care providers understand patients' wishes for end-of-life care.

This framework should include:

- *the determination of available palliative-care resources and the total cost of currently providing palliative-care services;*
  Status: Little or no progress.

Details

At the time of our follow-up, the Ministry still did not have information on the total cost of providing palliative care in Ontario due to administrative data limitations, nor did it have information on the available palliative-care resources in the province. The Ministry has received information on the total cost of providing health care in a patient's last year of life, which includes all health-care costs, including palliative care, for the various health-service providers, such as hospitals and long-term-care homes. The information indicated that for Ontarians deemed to be palliative, who subsequently died during the 2014/15 fiscal year, the overall cost of providing health care during their last year of life was close to $4 billion.

- *an analysis of the cost of providing palliative care through different service providers (for example, hospital versus hospice versus home care);*
  Status: Little or no progress.

Details

The Ministry has not conducted an analysis of the cost of providing palliative care through different service providers. As mentioned above, it has done some analysis of the total costs of providing health care to Ontarians who were deemed to be palliative in their last year of life. This information is available by type of service provider, such as hospital or home care; however, all health-care costs are assigned to the service provider that was providing care at the time of a person's death, regardless of where the person received care during the year leading up to their death.

The Ministry indicated that there are some data limitations in determining cost information for palliative care provided by the different service providers. For example, only a small number of patients in the acute-care setting are identified as receiving palliative care. One of the reasons for this is because it is difficult to determine which services provided to a patient toward the end of life are for managing a chronic condition and which are for palliative care. Associated with this is the timing issue in identifying someone as being a palliative patient—that is, when it can be determined that the patient is not likely to recover. The Ministry plans to explore whether a more precise estimate of the cost of providing palliative care can be provided given these data limitations.

- *a projection of the best mix of services (for example, hospital versus hospice versus home care) to meet current and future patient needs;*
  Status: In the process of being implemented by March 2019.

Details

The Network carried out a needs assessment and a capacity planning exercise to gather data on existing and future demand for residential hospice services and provided recommendations to the Ministry in April 2016. The Network said it plans to expand on this work in the 2016/17 fiscal year by conducting a needs analysis of palliative-care services

delivered in other care settings, such as at hospitals, at long-term-care homes, through home care and in the broader community. The Ministry indicated that it will use the information obtained through the needs analysis process to support future planning on the appropriate mix of palliative-care services in Ontario. It plans to have this completed by March 2019.

- *an assessment of current and potential future funding structures; and*
  Status: Little or no progress.

Details

The Ministry advised us that, depending on what the Network's expanded capacity planning exercise learns about the palliative-care needs of the broader community (such as hospitals, long-term-care homes and at home), as a first step it plans to develop specific recommendations for alternative models of palliative care by March 2019. Following those recommendations, the Ministry will then explore funding options for the alternative models of palliative care.

- *a position on educational requirements for health-care providers who provide palliative care.*
  Status: In the process of being implemented by March 2018.

Details

According to the Ministry, the Network has started to review educational and training supports for health-care providers delivering palliative care, on which it will provide recommendations to the Ministry. The Network will then work with the Ministry to identify core educational requirements by March 2018.

The Ministry changed the Personal Support Worker (PSW) qualifications on January 1, 2016, with amendments under the *Long-Term Care Homes Act, 2007*, coming into effect. These amendments incorporate new common educational standards for PSWs, which include palliative care. Educational requirements for other health-care providers, including nurses, have yet to be amended to incorporate palliative care.

In addition, a plan should be developed to implement the policy framework and ensure the ongoing provision of palliative-care services in accordance with the framework.

Status: In the process of being implemented by June 2017.

Details

The Ministry is in the preliminary stage of developing a comprehensive palliative and end-of-life care strategy which it expects to be completed by June 2017. The implementation plan is being developed as part of the strategy's development and the Network will be involved with the implementation of the strategy.

Lack of a Co-ordinated System

Recommendation 2

To reduce the overlap and duplication of efforts both within the Local Health Integration Networks and across the province, the Ministry should implement a co-ordinated system for the delivery of palliative care that enables patients to move easily among health-care providers and receive needed palliative-care services on a timely basis. This should include consideration of the cost-benefit of shorter-term information technology solutions (such as those currently used by some health-care providers to inform patient-care decisions and reduce unnecessary or duplicate tests) to increase the sharing of patient-related information, while longer-term initiatives are being pursued by eHealth Ontario.

Status: In the process of being implemented by March 2019.

Details

During the 2015/16 fiscal year, the Ministry of Health and Long-Term Care (Ministry) and the Ontario Palliative Care Network (Network) began to work with Local Health Integration Networks

(LHINs) and other palliative-care partners on the planning and development of 14 regional palliative-care networks across the province. These regional networks will provide advice to the LHINs to help in planning for the provision of palliative-care services and incorporating local priorities; and they will also provide advice on the development of palliative-care systems and performance measures, all in accordance with provincial standards. They will also strengthen partnerships between the different palliative-care service providers to ensure co-ordinated care for patients. Governance structures are expected to be in place for each of these regional networks by March 2017.

The Ministry is working with the Network to identify early best practices for models of care that will improve the integration and co-ordination of care for palliative patients. These early best practices will be identified by the end of the 2017/18 fiscal year and may include the use of technology.

While the Ministry continues to work toward implementing eHealth, which will enable a patient's medical history to be readily available to various health-service providers, it is considering establishing a palliative-care patient registry or technology solution in the short term. This registry, which is intended to support communication across different health-care settings and therefore promote seamless patient care transitions, is currently being reviewed by the Network and it intends to provide advice and an implementation plan to the Ministry by the end of the 2018/19 fiscal year.

Difficulties Accessing End-of-Life Care Services

Recommendation 3

To better ensure that patients have complete information about their prognosis and care options, including palliative care (which can increase quality of remaining life and reduce health-care costs), the Ministry, in conjunction with stakeholders such as the Clinical Council of the Hospice Palliative Care Provincial Steering Committee, should:

- *promote the adoption of a common process that enables physicians to more easily identify patients who might benefit from palliative care, such as by asking themselves: "Would you be surprised if this patient died within one year?"; and*

  Status: Little or no progress.

Details

The Ministry of Health and Long-Term Care continues to support the implementation of the INTEGRATE project, which was in place at the time of our audit. The project aims to identify patients with various diagnoses who would benefit early on from a palliative approach. It does this by asking the question "would you be surprised if your patient were to die in the next six to 12 months." INTEGRATE is a three-year pilot project in four regions of the province that began in 2014 and is being implemented by Cancer Care Ontario and funded by the Canadian Partnership Against Cancer.

The Network will wait to review the results of the INTEGRATE project before determining what best practices can be shared once 14 regional palliative-care networks are fully implemented (one in each LHIN).

The Network is also researching national and international tools used to support the identification of palliative care needs. Once completed, the Network's Clinical Advisory Council will review the tools and make recommendations to the Ministry on which tools should be shared province-wide.

- *put processes in place, such as through education, to ensure that physicians are sufficiently knowledgeable about the palliative approach to care and are comfortable having end-of-life conversations with their patients, including discussing a terminal diagnosis and care options with patients who are dying.*

  Status: In the process of being implemented by March 2018.

Details

Physicians and other service providers participating in the INTEGRATE pilot project from the four regions have completed the Learning Essentials Approaches to Palliative and End-of-Life Care (LEAP) training, which is primary-level palliative-care education, and includes such topics as Being Aware (awareness of patients that are near the end of life), Decision-Making and Essential Conversations.

The project provides educational resources to health-care providers to assist them in earlier identifying patients who would benefit from a palliative approach and then link them with care providers in the community.

As mentioned above, the Network will be reviewing the lessons learned from the INTEGRATE project to see what best practices can be shared through the regional palliative-care networks across the province, once regional networks are fully implemented. In addition, the Network's Clinical Advisory Council will recommend provincial direction for palliative-care education, which will focus on an integrated approach to palliative care. By March 2018, the Network plans to build health-care providers' skills by identifying best practices and educational offerings to support physicians in initiating a palliative approach to care, including earlier identification of palliative-care needs and to routinely engage in conversations about care planning and goals of care.

Eligibility Requirements Vary among Service Providers

Recommendation 4

To better ensure that patients requiring palliative care, including end-of-life care, have similar access to similar services across the province, the Ministry, in conjunction with stakeholders including the Hospice Palliative Care Provincial Steering Committee, should ensure that standardized patient eligibility practices for similar palliative-care services are developed and implemented.

Status: In the process of being implemented by March 2018.

Details

As part of *Patients First: A Roadmap to Strengthen Home and Community Care*, which was announced in May 2015, the Ministry of Health and Long-Term Care (Ministry) is developing a Levels of Care Framework to ensure there are common standards for assessing patients, determining eligibility and providing service, and that service allocation is consistent across the province.

To assist with the process, a Levels of Care Expert Panel was formed in August 2016 to provide advice and recommendations to the Ministry for a Levels of Care framework. The Ministry told us that, in 2017, it plans to use these recommendations to develop clear definitions of how much and what kind of support Ontarians can expect, based on their needs as determined by evaluation on such things as cognition and mental health, level of difficulty with daily activities, and behavioural issues. Standardized protocols would be applied based on the results, in order to provide consistent care.

The Levels of Care Framework will be developed in 2018. In order to achieve this, the Ministry has held consultation workshops with patients, caregivers, health-service providers, and sector stakeholders, and has entered into an agreement with the University of Waterloo to develop the technical aspects of the framework and conduct further research to support it. It is also working with Health Quality Ontario to develop clinical guidelines for delivering palliative care, the first of which for wound care is planned to be released in 2017.

Better Access to Physicians Needed

Recommendation 5

In order to provide patients with the care they need in the community, and help prevent unnecessary and more expensive hospital-based care, the Ministry, in conjunction with the LHINs, should consider options

for promoting the provision of palliative care by family physicians, such as the creation of additional palliative-care teams to support family physicians who deliver home-based palliative care.

Status: In the process of being implemented by March 2018.

Details

The Ministry of Health and Long-Term Care (Ministry) informed us of resources available to support family physicians delivering palliative care. For example, Cancer Care Ontario's website features a palliative-care toolkit for health-care providers, which includes resources to allow them to earlier identify when palliative care is needed, to help them assess patients' needs and to guide and coordinate symptom management and general care. The Ministry will work with the Ontario Palliative Care Network (Network) to determine the best way to further promote the toolkit and other information available.

Starting in 2016, the Ministry plans to examine the creation of palliative-care teams. It intends to look at the outcome of the Network's capacity planning exercise on palliative-care needs in the broader community and based on this information it will identify best practices and models of team-based care to support front-line care providers, such as family physicians, in providing palliative-care services.

As well, the Ministry should assess physician payments for palliative care, within a palliative-care policy framework, to ensure that patients' needs are best met cost-effectively.

Status: Little or no progress.

Details

The Ministry continues to fund physicians through the Community Palliative Care On-Call Program that was in place at the time of our audit. This program provides payments to physician groups for being available 24 hours a day, 365 days a year to provide palliative-care services in patients' homes or in a community setting. There are currently 29 on-call group agreements in place, with annual funding of approximately $5 million.

In 2016/17, the Network plans to review current funding approaches in place for palliative care, including alternate funding arrangements for physicians. This review will build on the work of an expert panel struck by the former Hospice Palliative Care Provincial Steering Committee's Clinical Council. The Network is reaching out to stakeholders, including physicians, to better understand the gaps in alternate funding approaches. The information collected will be used to develop recommendations that will be provided to the Ministry by March 2017.

The Ministry then needs to consider the recommendations provided and undertake an assessment of physician payments. After the Ministry makes a decision on physician payments for palliative care, it will need to hold discussions with relevant stakeholders.

Better Access to Nurse Practitioners and Nurses Needed

Recommendation 6

The Ministry, in conjunction with the Local Health Integration Networks, should review the distribution of nurse practitioners to ensure that it reflects patient needs and provides patients with access to palliative care at home 24 hours a day, seven days a week.

Status: Little or no progress.

Details

In June 2016, the Ministry of Health and Long-Term Care's (Ministry) Health Workforce Planning and Regulatory Affairs Division provided the most recent data (from 2014) on the distribution of nurse practitioners across the LHINs. The Ministry told us it would work with the Ontario Palliative care Network (Network) (which will be doing capacity planning for the palliative-care needs of the broader community) and other relevant parties to determine equitable distribution of nurse practitioners (based on palliative needs across the Local Health

Integration Networks) and to identify additional data and modelling needed. The Ministry plans to complete a preliminary analysis in 2018/19. This work will also explore opportunities to improve 24-hour-a-day access to palliative care at home and in the community.

The Ministry should also work with other service providers to develop innovative alternatives for providing nursing care to patients at home.

Status: In the process of being implemented by March 2019.

Details

As part of *Patients First: A Roadmap to Strengthen Home and Community Care*, the *Home Care and Community Services Act* was amended, effective October 1, 2015, to provide better access to palliative care at home by increasing the maximum number of nursing visits per month to 150 from 120, as well as increasing the number of hours that can be provided by Community Care Access Centres (CCACs) by approximately 50 hours per month. It also allows CCACs to provide more than the maximum number of visits or hours to people in their last stage of life, or if the CCAC determines that extraordinary circumstances justify providing additional services.

In addition, the Ministry intends to explore innovative alternatives for providing nursing care at home or in the community by March 2019.

Patients Waiting in Hospital for Other Palliative-Care Services

Recommendation 7

The Ministry, in conjunction with the Local Health Integration Networks, should ensure that hospitals across the province consistently track and report the extent of time patients no longer requiring acute care must wait in this more expensive setting for care at home or in a hospice, and take action where necessary.

Status: Little or no progress.

Details

The Ontario Palliative Care Network (Network) said it intends to consider the inclusion of a performance indicator for alternate level of care (ALC) as part of its future performance indicator work. It will also collaborate with the 14 regional palliative-care networks when they are operational, to explore opportunities to improve tracking of ALC data for palliative patients through the Wait Times Information System (WTIS), operated by Cancer Care Ontario. The Ministry of Health and Long-Term Care plans to work with the Network and its Clinical Advisory Council to support a standard process for provincial reporting on ALC indicators for palliative care to monitor and reduce the number of patients waiting in hospital for non-acute palliative-care services by March 2019.

Hospice Beds Not Used Optimally

Recommendation 8

To better ensure that hospice beds are available to patients when needed, the Ministry should explore, such as by reviewing best practices in other jurisdictions, the feasibility of increasing the occupancy rate of hospice beds from the current minimum of 80%.

Status: Little or no progress.

Details

In the fall of 2015, the Ontario Palliative Care Network (Network) collected data and feedback from the Local Health Integration Networks (LHINs) and health-service providers on hospice capacity across the province. The information noted that the average occupancy rate for hospices in 2014/15 was 72%. The Ministry of Health and Long-Term Care (Ministry) plans to use this data in a review of occupancy requirements for hospices, which it will complete by March 2018. After that, the Ministry indicated that it will collaborate with partners to explore opportunities to increase hospice occupancy rates.

To increase the availability of hospice beds and palliative care services, the government's

2016 budget committed to $75 million in additional funding over the next three years for up to 20 new hospices and other initiatives, including increased funding for existing hospices, which will provide more access for palliative patients.

Public Education on End-of-Life Care Services and Planning Needs Improvement

Recommendation 9

To better ensure that patients receive health care consistent with their preferences and reduce unnecessary health-care costs, the Ministry, in conjunction with stakeholders, should ensure that:

- *public information is readily available on palliative-care services and how to access them, as well as on the importance of advance care planning for end-of-life care to communicate health-care preferences; and*
  Status: In the process of being implemented by March 2018.

Details

Since the time of our audit, the Ministry of Health and Long-Term Care (Ministry) examined the resources on palliative and end-of-life care available to the public. These resources included the Government of Ontario's website, which has a directory of health-care services—including hospices—available in communities; Hospice Palliative Care Ontario's (HPCO) website, which features information on palliative care resources available across the province, and tools and videos on advance-care planning; and HPCO's Speak Up Ontario website, which houses information about health care consent and advance care planning, including an online tool to guide members of the public through an advance care planning process.

In addition, the Ministry, the Ontario Palliative Care Network (Network) and HPCO plan to improve the information available and increase public awareness on palliative care and end-of-life issues. For example, the Ministry and the Network are working with HPCO's Health Care Consent Advance Care Planning Community of Practice group that has created advance care planning materials with an emphasis on teaching advance care planning and health-care consent to health-care providers. The focus of this project, which is to be completed by March 2018, is to better prepare health-care providers to initiate conversations with their patients that encourage patients to express their health care wishes.

The Network and other stakeholders will also help disseminate expert advice and information on palliative care resources through the regional palliative care networks, when they become operational.

- *processes are in place to allow health-care providers timely access to patients' advance care plans to inform their discussions with patients or their substitute decision-makers.*
  Status: Little or no progress.

Details

The Ministry told us it plans to undertake further work with the Network and other partners, to explore options for addressing barriers that exist to health-care providers' access to patients' health-care preferences. More specifically, the Network, in collaboration with HPCO, said it will explore ways to enable access to patients' expressed wishes, values and beliefs that are outlined in their advance care plans to be easily shared across different care settings. The Ministry intends to come up with a plan on how to make improvements by March 2018, but it has not indicated when it will implement these improvements.

Lack of Measures to Monitor Performance

Recommendation 10

To better monitor the delivery of palliative-care services in Ontario, the Ministry, in conjunction with the

Hospice Palliative Care Provincial Steering Committee, should adopt standard palliative-care performance indicators and associated targeted performance levels for all key service providers to allow the comparison of their programs' efficiency and effectiveness, and to identify areas requiring improvement.

Status: In the process of being implemented by March 2019.

Details

Since the time of our audit, the Ontario Palliative Care Network (Network) has established a Data and Information Advisory Council to refine, prioritize and evaluate six palliative-care indicators that had been previously identified. A report given to the Ministry of Health and Long-Term Care (Ministry) in June 2016 proposed four of these performance indicators (one of the previous indicators relating to cancer was dropped and another relating to wait times was deemed to need more refinement).

Once the measures are approved by the Network's executive oversight group, associated performance targets are to be developed by the Network, with implementation starting in the 2018/19 fiscal year.

The Network and its partners will also develop a provincial scorecard for palliative care performance and will begin work on this during the 2016/17 fiscal year. The Network will also support the Local Health Integration Networks (LHINs) in using the provincial performance measures and associated targets for palliative care to align with provincial direction. The regional palliative-care networks, when operational, will be accountable for performance measurement to both their LHIN CEOs and the vice-presidents of the regional cancer programs.

2011 Vision for Palliative Care Lacks Linkage to Government Policy Framework

Recommendation 11

To better ensure that the key goals and commitments made in the 2011 document Advancing High Quality, High Value Palliative Care in Ontario: A Declaration of Partnership and Commitment to Action *(Declaration of Partnership) are being addressed on a timely basis, the Ministry, in conjunction with the Hospice Palliative Care Provincial Steering Committee, should link the Declaration of Partnership to a policy framework for approval by the government. Such action would provide the necessary direction and funding if needed to ensure that timelines for implementing the commitments are established, along with effective oversight to regularly monitor the implementation's progress and take action where necessary.*

Status: In the process of being implemented by June 2017.

Details

As mentioned previously, the Ministry of Health and Long-Term Care has committed to develop a comprehensive strategy for palliative and end-of-life care, which is being informed by the 2011 Declaration of Partnership, the 2014 audit, and the 2016 *Palliative and End-Of-Life Care Provincial Roundtable Report*, which outlined first steps toward strengthening the palliative and end-of-life care system.

The strategy is expected to be developed by June 2017, and the Ontario Palliative Care Network is responsible for co-ordinating activities on the strategy and will be involved with implementing the strategy.

Ministry of Citizenship and Immigration

Provincial Nominee Program

Follow-Up on VFM Section 3.09, *2014 Annual Report*

RECOMMENDATION STATUS OVERVIEW						
	# of	Status of Actions Recommended				
	Actions Recommended	Fully Implemented	In Process of Being Implemented	Little or No Progress	Will Not Be Implemented	No Longer Applicable
Recommendation 1	4	1	1	1		1
Recommendation 2	5	5				
Recommendation 3	8	4	2	1	1	
Recommendation 4	4	3	1			
Recommendation 5	3	1				2
Recommendation 6	4	1	3			
Recommendation 7	4	3			1	
Recommendation 8	3	2	1			
Recommendation 9	2	1	1			
Recommendation 10	6	5	1			
Recommendation 11	4	4				
Recommendation 12	5	3	2			
Recommendation 13	3	2		1		
Recommendation 14	3		3			
Total	**58**	**35**	**15**	**3**	**2**	**3**
%	**100**	**60**	**26**	**5**	**4**	**5**

Background

The Ontario Immigrant Nominee Program (Program), formerly known as the Provincial Nominee Program, delivered by the Ministry of Citizenship and Immigration (Ministry)—formerly the Ministry of Citizenship, Immigration and International Trade—is the only immigration selection program administered by the Ontario government. Immigrants are nominated by the Program based on their potential economic contribution to the province.

Under the Program, the Province is allowed to select and recommend ("nominate") to the federal government foreign nationals and their accompanying family members for permanent residency in Canada. At the time of our audit, the Program had

three components: an employer-driven component, for businesses to fill permanent positions in professional, managerial or skilled-trades occupations; an Ontario graduate component, which allows international students graduating from Ontario universities with post-graduate degrees to qualify for nomination without a job offer; and an investment component, which lets investors permanently relocate staff (who may have foreign worker status) to Ontario.

From the Program's inception in 2007 to June 2016, Ontario nominated about 12,000 people (6,600 from 2007 to June 2014). As of December 31, 2015, 17,042 people—8,258 nominees and 8,784 family members—had become permanent residents (formerly known as "landed immigrants") through the Program. (In 2014, about 7,100 people became permanent residents—3,900 nominees and 3,200 family members.) Each year, the federal government determines nomination allocations for each of the provincial and territorial nominee programs. In 2016, Ontario's nomination allocation was 5,500 (5,200 in 2015).

Because Ontario is considered a very attractive province to immigrate to, the Program must have effective controls and processes in place to select qualified nominees and detect immigration fraud. A weak program can be targeted by unscrupulous potential immigrants and immigration representatives. Our audit found that the necessary controls and processes were not in place, and that significant issues regarding the Program needed to be addressed.

There was a significant risk that the Program might not always be nominating qualified people who could be of economic benefit to Ontario. In some cases, it could be difficult to distinguish jobs that were eligible and ineligible under the Program. Seven years after the Program had begun, it still lacked the necessary tools, including policies, procedures and training, to help Program staff make sound and consistent selection decisions. In addition, we found that Program staff had not been provided with clear guidelines on how to deal with immigration fraud.

In our *2014 Annual Report*, we noted the following significant issues:

- From 2007 to 2013, 20% of the 400 denied applicants were turned down because of misrepresentation. However, there was nothing stopping people who had misrepresented themselves or their clients from reapplying or representing other clients. The Program did not have a protocol in place to ban applicants or their representatives who had submitted fraudulent applications.
- The Program did not follow up on questionable files that were approved but flagged for follow-up. About 260 files were flagged between October 2011 and November 2013, but only 8% had been followed up on at the time of our audit. The Ministry did not review the majority of the 260 files before 71% of these nominees became permanent residents.
- The Ministry delayed formally reporting information relating to potential abuse of the Program to the federal government and proper law enforcement agencies and did not provide vital personal information to them, thereby potentially delaying corrective action against individuals who might be abusing the Program. As well, the Program did not report its concerns about certain immigration representatives (such as immigration lawyers and immigration consultants) to their respective regulatory bodies.
- Program management did not share program integrity concerns with internal staff in order to enhance their due-diligence processes.
- The Program is required to select nominees who can contribute economic benefits to Ontario, but the Program allowed the nomination of people with no job offers. Two-thirds of the nominees in 2013 were international students with a post-graduate degree but no job offer. The Ministry had not evaluated whether these nominees became employed

and were making an economic contribution to Ontario.

- Staff turnover in the Program had been high, with 31 staff leaving the Program and 59 staff starting between January 2012 and June 2014. As of March 31, 2014, there were 45 staff working in the Program.
- Even though the Ministry says publicly that applications are processed on a first-come, first-served basis, certain applications were given priority and processed at least three times faster than others. We noted that files submitted by a certain representative, who was a former Program employee, were given priority.
- Significant data integrity issues were noted with the computerized case management system, and there were weak internal controls over nomination certificates.

Some of our recommendations included that the Ministry file formal complaints with the RCMP and any applicable regulatory bodies as soon as it has evidence of potential immigration fraud; implement the necessary steps to allow banning of applicants and representatives who have misrepresented themselves or clients; establish limits for the proportion of nominees without job offers who can be accepted; scrutinize applicants applying for jobs in classifications where they could be misrepresenting their work experience; enhance Program staff training, including on ethical matters and management expectations; require that Program staff obtain security clearance; and develop a process to track representatives and applicants of concern, and to alert processing staff of these concerns.

We made a number of recommendations for improvement and received commitments from the Ministry that it would take action to address our recommendations.

Status of Actions Taken on Recommendations

The Ministry provided us with information in the spring and summer of 2016 on the current status of the recommendations we made in our *2014 Annual Report*. According to this information, the Ministry had fully implemented 60% of our recommendations in the areas of putting in place and periodically updating an operating manual; conducting a review of applications flagged for follow-up and submitted by questionable representatives; and maintaining an accurate record of when nominations issued and withdrawn are communicated to the federal government. The Ministry was in the process of implementing a further 26% of our recommendations, mainly in the areas of defining when site visits or in-person interviews are warranted and tracking the use of these techniques; and filing formal complaints with law enforcement agencies and regulatory bodies when there is evidence of potential immigration fraud. Overall, the Ministry either had fully implemented or was in the process of implementing about 86% of our recommended actions.

However, the Ministry had made little or no progress in the following areas: defining acceptable forms of local recruitment effort; requiring applicants applying under the PhD component to meet an asset requirement; and obtaining nominee information, such as driver's licence numbers to help follow up on nominee outcomes.

The status of each of our recommendations is as follows.

Impact of the Current Program Design

Recommendation 1

To ensure that the Provincial Nominee Program is achieving its expected outcome of nominating candidates who will be of benefit to the economic

development of Ontario and have a strong likelihood of becoming economically established in Ontario, the Ministry of Citizenship, Immigration and International Trade should:

- *establish limits for the proportion of nominees who can be accepted without job offers;*
  Status: No longer applicable. We found that the Ministry's action and decision are appropriate and addressed our initial audit concerns.

Details

We noted in our 2014 audit that the Ministry had not adequately assessed whether nominees without a job offer were eventually employed after admission to Ontario—despite the fact that in 2013, the Program had accepted two-thirds of its nominees under categories not requiring a job offer. In July 2015, the Ministry commissioned a marketing research company to conduct an outcomes study on nominees without a job offer. The study found that 89% of these nominees who became permanent residents in 2012 were employed within a year of becoming permanent residents. In comparison, a lower percentage—about 50%—of all immigrants who became permanent residents that year were employed within a year of becoming permanent residents. Given these results, at the time of this follow-up, the Ministry indicated that it will continue to monitor the component involving nominees without a job offer and that it will consider establishing limits for how many of these nominees can be accepted in the future.

- *better scrutinize applicants applying for jobs classified as National Occupational Classification (NOC) B for misrepresenting work experience, and job offers that are in fact in lower-skilled categories;*
  Status: Fully implemented.

Details

For nominees who have a job offer, the Program accepts only those whose jobs fall into National Occupational Classification (NOC) 0, A or B. Between 2007 and 2013, 58% of nominees with a job offer were in NOC B occupations, which require a college education or apprenticeship training. In our 2014 audit, we found that distinguishing a NOC B position from one in a lower-skilled category (NOC C or D), which is ineligible for nomination, was often difficult because job descriptions can contain similar duties. Of specific concern was that most applicants with a job offer who had been found to have misrepresented themselves had applied to the Program under a NOC B position.

In February 2015, the Ministry developed an assessment tool to support processing consistency, which included an assessment of the NOC categorization. Program staff began using the assessment tool in June 2015. As a part of this tool, the Ministry requires Program staff to interview employers in all cases when it expects to proceed with nomination. The Program's operating manual also instructs the Program's investigator analysts to ensure that nominee applicants' job duties match those of a NOC 0, A, or B position and are specific to the employers' business. When applications contain job duties that appear to reflect lower-than-required skill levels, Program staff are required to deny those applications.

- *obtain labour force data by region and occupation, and utilize labour market information from the Ministry of Training, Colleges and Universities regarding occupations with better prospects for employment to prioritize positions for approval;*
  Status: In the process of being implemented by September 2017.

Details

In our 2014 audit, we found 115 nominations between 2009 and 2015 for 30 occupations that the then Ministry of Training, Colleges and Universities (MTCU; now the Ministry of Advanced Education and Skills Development) had deemed to have below-average prospects for employment extending into 2013. In 2014, the Ministry obtained MTCU's

Ontario Job Futures publication, which provides information on the current trends and future outlook for about 200 occupations common to Ontario, giving the Ministry more up-to-date information on jobs with better prospects for employment. The Ministry also informed us that it reviews immigration and labour force data from Statistics Canada on a quarterly basis. As well, in 2012, the Ministry began purchasing labour market forecasts of supply and demand for over 500 occupations in five economic regions in Ontario over the next 10 years. But at the time of this follow-up, despite having collected these data resources, the Ministry was not using them to prioritize positions for approval. The Ministry continued to process all positions within the three acceptable NOC codes on a first-come, first-served basis.

The Ministry informed us that it had consulted with selected employers in the 2014/15 fiscal year to identify and validate labour market needs across the province. In May 2015, deputy ministers from the Ministry and MTCU met to discuss building an evidence base on labour market information for immigration policy and planning. At the time of this follow-up, the Ministry indicated that it will continue working with other ministries to develop labour market data.

- *define acceptable forms of local recruitment effort, and require employers hiring international students to prove attempts to recruit Canadian citizens or permanent residents located in Ontario.*
  Status: Little or no progress.

Details

The Ministry informed us that it had included guidelines regarding local recruitment efforts in its 2015 operating manual and in a December 2015 operational bulletin to staff. But at the time of this follow-up, the manual still did not define what forms of local recruitment effort are considered acceptable. The operating manual requires staff to consider, among other things, where job advertisements were posted and if they were "published for a period that would have allowed interested candidates sufficient time to learn of the job opportunity and submit an application." The Ministry did not define what constitutes "sufficient time" and did not have expected timelines on when it might do so. We noted in our 2014 audit that the federal government had more specific requirements for its temporary foreign workers in higher-skilled positions, requiring employers to advertise jobs for a minimum of four weeks on the national online Job Bank and via two other specified methods, such as print media.

The Ministry noted that the intent of the international-student-with-job-offer component is to facilitate the retention of international students who will be of benefit to Ontario's economic development. Therefore, the Ministry still does not require employers to demonstrate any local recruitment efforts for nominees from this component. The Ministry indicated, however, that it would consider doing so in the future.

Processing Environment

Recommendation 2

To ensure that the Provincial Nominee Program operates with the necessary resources and tools in a strong ethical environment, the Ministry of Citizenship, Immigration and International Trade should:

- *assess its staffing needs and review the appropriateness of the current staffing model;*
  Status: Fully implemented.

Details

Following our 2014 audit, the Ministry eliminated the seasonal staffing model (full-time employees on annually recurring fixed-term contracts, who work 10 months a year) in November 2015 and moved to a permanent full-time staffing model. The Ministry informed us that the first round of job offers was made in May 2016, and that it expects all positions to be permanently staffed by August 31, 2016.

- *implement an operating manual and update it periodically with input from program staff;*
  Status: Fully implemented.

Details

Although the Program has existed since 2007, the first operating manual was not developed until 2011, and that manual was never implemented (i.e., made available to processing staff). In 2014, during our audit, the Ministry began developing another operating manual. This manual was implemented in June 2014, and updated in January 2015 and again in April 2016. The Ministry indicated to us that the manual will be updated annually to reflect new and revised operating policies and procedures, and that feedback from processing staff will be used when considering content revision.

- *enhance the training plan for all program staff, considering their training needs, including training on ethical matters and management expectations;*
  Status: Fully implemented.

Details

Before the start of our 2014 audit, no program-specific staff training had existed. In April 2014, during our audit, two ministry staff members with training expertise delivered a one-week training course to processing staff that covered Program-specific topics, but this course was designed and delivered without input from processing staff. As a result, some topic areas of concern, such as how to evaluate local recruitment efforts, were left out of the training material.

In March 2015, the Ministry delivered a 10-day training program to various groups of Program staff, with content changing depending on their job requirements. Program staff and staff from legal services facilitated this training. The Ministry provided further training to Program staff in July 2016, which covered ethics and conflict of interest. It also indicated that it will review and restructure staff training to reflect ethical matters in preparation for proclamation of the *Ontario Immigration Act*, expected by March 31, 2018.

- *require that program staff obtain security clearance;*
  Status: Fully implemented.

Details

Government policy states that security clearance checks should be conducted for staff who have access to sensitive information; however, at the time of our 2014 audit, Program staff were not required to undergo security checks even though they handle sensitive information relating to potential immigrants.

In December 2014, the Ministry began completing security clearances. At the time of this follow-up, the Ministry informed us that all staff have the required clearance to work with sensitive information and that the Ministry had begun requiring new staff to obtain a security clearance as a condition of employment.

- *strengthen procedures that support the maintenance of an ethical environment within the Program and that respect the provisions in the* Public Service of Ontario Act, 2006 *for preventing conflicts of interest and disclosing wrongdoing.*
  Status: Fully implemented.

Details

During our 2014 audit, we surveyed Program staff to gauge their experiences and perceptions of their workplace's ethical environment. We found that 39% of staff indicated that they had not been provided adequate training to know what to do if a co-worker or direct report approaches them with an ethical dilemma or conflict-of-interest situation. As well, about 46% did not know or were unsure to whom they should report incidents of ethical misconduct or suspected fraud involving Program staff.

At the time of this follow-up, the Ministry's operating manual included an appendix on conflict of interest, outlining what a conflict of interest is

and quoting from the *Public Service of Ontario Act, 2006*, as well as providing information on how and to whom staff should declare a conflict or report wrongdoing. Conflict of interest was also covered in the Ministry's March 2015 training for Program staff, and the Ministry informed us that at that time, all staff were required to complete an e-training course on conflicts of interest. The Ministry indicated that it intends to conduct the e-training annually and at the point of recruitment for new employees.

Application Assessment and Processing

Recommendation 3

To ensure that only qualified individuals are nominated and to detect misrepresentation, the Ministry of Citizenship, Immigration and International Trade should:

- *define when site visits or in-person interviews are warranted, and track the use of these techniques;*
  Status: In the process of being implemented by April 2017.

Details

In our 2014 audit, we found that the Ministry did not define when site visits or in-person interviews were needed. At the time of this follow-up, the Program's operating manual provided examples of when processing staff should refer files suspected of misrepresentation to the Program's integrity unit for further work, which could include site visits or in-person interviews. However, the integrity unit still has the discretion to decide whether a site visit or an in-person interview is needed. In August 2016, the Ministry developed draft guidelines that define situations when a site visit or an in-person interview is required. The Ministry informed us that it will be including these guidelines in the next operating manual update, expected to be made by April 2017.

At the time of this follow-up, the Ministry was tracking the use of site visits and in-person interviews. The Ministry also indicated that it intends to begin conducting site visits proactively rather than waiting for Program staff to identify high-risk applications after the *Ontario Immigration Act* is proclaimed (expected by March 31, 2018).

- *require that nominee applicants submit clear photographs;*
  Status: Fully implemented.

Details

In June 2015, the Ministry updated its application guides to include a requirement for applicants to submit original and clear photographs with their application. These application guides specify that any photographs that are not clear or are of low quality will not be accepted.

- *verify applicants' history of applying to the Program;*
  Status: Fully implemented.

Details

During our 2014 audit, we could not find any evidence indicating that processing staff checked whether an applicant had previously applied to the Program and been denied. At the time of this follow-up, the Program's operating manual included a step instructing processing staff to check whether an applicant had previously applied and been denied for misrepresentation. The Ministry informed us that it has begun requiring Program staff to document the results of this check in an assessment tool used to aid decision-making on applications from potential nominees.

- *only permit translated documents from persons independent from the applicants or their representatives;*
  Status: Fully implemented.

Details

During our 2014 audit, the Ministry required that any application documents not in English or French

be translated and that the translator declare before a person taking an affidavit that he or she has made a true and correct translation. However, there were no requirements that the translator be independent from the applicant or the applicant's representative. Following our audit, the Ministry updated its application guides to state that translations completed by the applicant, the applicant's representative, or other individuals with personal ties to the applicant are not acceptable.

- *assign nominee applications from the same employer to the same processing staff;*
  Status: Will not be implemented. The Office of the Auditor General continues to support the implementation of this recommendation.

Details

At the time of this follow-up, the Ministry informed us that it cannot always assign nominee applications from the same employer to the same processing staff as a result of staff turnover and workload management.

- *clarify for staff what constitutes sufficient evidence to confirm that eligibility requirements have been met, and monitor that staff apply the rules consistently;*
  Status: In the process of being implemented by September 2017.

Details

In our 2014 audit, we heard from processing staff that they were unclear about how to determine whether employers had made sufficient local recruitment efforts. The operating manual in place during this follow-up still did not specify what is considered sufficient evidence.

The Ministry informed us that the Program's integrity unit began conducting regular quality assurance exercises in March 2016 to monitor whether eligibility requirements were being assessed consistently. However, given that requirements for local recruitment efforts are still not clearly defined, we believe there is more work to be done.

- *define the circumstances under which special consideration can be given and track how frequently it is given;*
  Status: Fully implemented.

Details

In our 2014 audit, we noted that the program manager had discretion to approve files that had not fully met eligibility criteria through a special consideration process. None of the Program's policies or guidelines discussed when special consideration could be given, but we were informed that this discretion can be used, for example, when a job offer's salary rate deviates slightly from the prevailing wage. At the time of this follow-up, the Ministry informed us that it had removed the discretion to give special consideration to applications in July 2014, following our audit.

- *require all applicants without job offers to meet asset-requirement conditions.*
  Status: Little or no progress.

Details

In our 2014 audit, we found that of the two Program components involving individuals without a job offer, only one had to meet asset-requirement conditions. Those with a master's degree had to prove that they had sufficient assets to afford to live in Ontario while transitioning to gainful employment, but there was no similar requirement for those with a PhD. A Ministry-commissioned outcomes study released in 2015 found that a high number of nominees who held a master's degree or a PhD had been able to find jobs. At the time of this follow-up, the Ministry indicated that it will consider requiring applicants applying under the PhD component to meet the asset requirement in a program redesign expected to be complete by April 2017.

Recommendation 4

To ensure that processing staff appropriately scrutinize applications represented by potentially unscrupulous representatives and to deter unscrupulous

nominee applicants from taking advantage of the Provincial Nominee Program, the Ministry of Citizenship, Immigration and International Trade should:

- *develop a process to track representatives and applicants of concern, and to alert processing staff;*
  Status: Fully implemented.

Details

During our 2014 audit, we found that the Ministry had a list of representatives who were of concern for various reasons, including past misrepresentation. However, many staff members either were not aware of the list or did not use it because it was not official. In April 2015, the Ministry updated its computerized case management system to allow representatives, employers, and applicants of concern to be flagged by processing staff for enhanced vigilance. As well, in April 2016, the Ministry issued an operational bulletin to staff indicating that program integrity staff will be maintaining and updating a list of employers and representatives of concern based on their investigations, and that processing staff are to use this list to flag new applications involving a listed employer or representative. Processing staff are to refer flagged files to the Program's integrity unit for further action.

- *define situations where the banning of representatives and applicants is warranted, and implement necessary steps to allow banning;*
  Status: In the process of being implemented by March 2018.

Details

In November 2014, the then Minister of Citizenship, Immigration and International Trade introduced a bill titled the *Ontario Immigration Act* (Act) in the Ontario Legislature, which will give the Ministry legal authority to ban individuals from making an application or providing services to an applicant. The Act received Royal Assent in May 2015. Once proclaimed, the Act will authorize the program director to ban individuals who have contravened the Act from applying or representing applicants for two years. The Ministry anticipates that the Act will be proclaimed by March 31, 2018.

At the time of this follow-up, the Ministry had not yet defined situations when the banning of representatives and applicants is warranted.

- *conduct a review of the 234 nominee applications that were submitted by questionable representatives;*
  Fully implemented.

Details

Our 2014 audit found that the Ministry had denied applications from 30 representatives on the basis that they had submitted fraudulent information on behalf of their clients. But in the period from January 2011 to April 2014, these representatives had represented a total of 234 other nominee applicants that the Ministry had approved.

In April 2015, program integrity staff reviewed those 234 applications and noted that 20 of the files included a possible misrepresentation. Of these 20 files, 18 of the nominee applicants had already become permanent residents at the time of the Ministry's review; one file was subsequently found to not contain a misrepresentation; and one applicant's nomination certificate had been cancelled for other reasons before the review. The Ministry shared the results of this review with Immigration, Refugees and Citizenship Canada (formerly Citizenship and Immigration Canada) in June 2015.

- *conduct a review of the 262 applications that were flagged for follow-up.*
  Status: Fully implemented.

Details

Before November 2013, the Ministry allowed staff to approve a file but flag it for follow-up if staff felt that the file warranted further monitoring to ensure continued eligibility for nomination. Although this practice was discontinued in November 2013, our 2014 audit found that 262 files had been approved but flagged for follow-up between October 2011 and November 2013.

In March 2015, the Program's integrity unit reviewed those 262 applications and did not note any substantive issues. The Ministry shared the results of this review with Immigration, Refugees and Citizenship Canada in June 2015.

Recommendation 5

To ensure that application processing practices are fair and transparent and that nominees meet the province's economic needs, the Ministry of Citizenship, Immigration and International Trade should:

- *revisit the practice of maintaining a priority list of employers;*
  Status: Fully implemented.

Details

Although the Ministry stated publicly that applications are processed on a first-come, first-served basis, our 2014 audit noted that if an applicant was applying for a position with an employer on the Program's priority list, that applicant's file could be prioritized and processed three times faster than other files. In March 2015, the Ministry suspended employer prioritization pending a review of operating procedures and policies regarding priority processing and moved back to a first-come, first-served basis. At the time of this follow-up, the Ministry indicated that it is still processing applications primarily on a first-come, first-served basis (except where an applicant's permission to stay in Canada is about to expire), but is exploring the possibility of an expression-of-interest system that would allow it to prioritize applications based on labour market data.

- *seek input from those ministries that oversee sectors that the government considers strategic to determine which employers are to be included on the priority list;*
  Status: No longer applicable.

Details

This recommendation is no longer applicable because the Ministry suspended the practice of maintaining a priority list of employers in March 2015. During this follow-up, the Ministry informed us that, if it reintroduces a priority list of employers, it will work with other ministries to identify priority sectors and occupations.

- *inform the public if a priority list is to be maintained.*
  Status: No longer applicable.

Details

At the time of this follow-up, the Ministry did not maintain a priority list, so this recommendation is no longer applicable.

Recommendation 6

To ensure an efficient and effective application screening process, the Ministry of Citizenship, Immigration and International Trade should:

- *delay implementation of a single-tiered application assessment process until more robust training and guidance for staff is in place and being used effectively;*
  Status: Fully implemented.

Details

At the time of this follow-up, the Ministry informed us that it will not be implementing a single-tiered application assessment process, because such a model would not enable consistent and reliable decision-making across all application submissions.

- *have a system that will allow it to readily track how long it takes to process an application and an appeal, and follow up in a timely manner on those that are significantly overdue;*
  Status: In the process of being implemented by November 2016.

Details

At the time of this follow-up, the Ministry informed us that it had started to build a system prototype to track application processing times, but further testing and system changes were still required.

The Ministry anticipated that the system would be upgraded by November 2016.

- *refer investor applications to assessing ministries for review in a timely manner, establish a standard processing time for the assessing ministries to complete their review, and follow up when assessments are significantly overdue;*
  Status: In the process of being implemented by March 2018.

Details

Although the Ministry closed the investor component in October 2015, at the time of this follow-up, the Ministry was still finalizing 30 investor applications from this closed component. The Ministry indicated that it is working with the other assessing ministries to complete the assessment of these files and anticipates that all but two files will be completed by December 2017. These remaining two files are currently on hold with an assessing ministry because construction of the related facilities on which the files depend has not been completed.

- *implement electronic filing for all program components as soon as possible.*
  Status: In the process of being implemented by September 2017.

Details

During our 2014 audit, the Ministry informed us that it was planning to implement electronic filing (e-filing) to enable applicants to submit and track the status of their applications online. The Ministry informed us that it had undertaken an e-filing pilot in 2015 and that, as part of that process, it had experienced challenges that had not previously been considered. The Ministry also informed us that it was leveraging best practices from its counterparts in British Columbia based on their recent information technology developments. The Ministry expects to conduct the implementation of e-filing in phases, with the first phase implemented in August 2016 and full implementation expected by September 2017.

Recommendation 7

To ensure that all investment component applications are consistently assessed on how well they achieve program objectives, the Ministry of Citizenship, Immigration and International Trade should:

- *develop screening criteria to assess whether an investment project is of significant economic benefit to Ontario;*
  Status: Fully implemented.

Details

The Ministry closed the investment component that was in effect during our 2014 audit in October 2015 and introduced two new business components (described later in this follow-up) in December 2015. The Ministry informed us that individuals applying under these two new components are required to sign performance agreements outlining criteria that must be met before the applicant or investor becomes eligible for nomination. Examples of such criteria include making a minimum financial investment and creating a minimum number of jobs for Canadians and permanent residents in Ontario.

- *arrange for cost-effective expertise to assist in assessing an investment's viability;*
  Status: Fully implemented.

Details

The Ministry launched two new business components in December 2015. The first, called the corporate component, replaced the old investment component. The second, called the entrepreneur component, is a new component that requires applicants to submit at their own expense a third-party assessment of their net worth and legal source of funds. Both components also require applicants to submit a business case so that the Ministry can assess the project's viability. The Ministry informed us that it can choose to have internal Program staff assess these business cases, or engage a third party to assist with the assessment (at the applicant's expense). At the time of this follow-up, the Ministry

had not yet accepted any applications under these components, so there had not yet been a need to assess business cases.

- *consider increasing the investment threshold to discourage passive investing;*
  Status: Fully implemented.

Details

At the time of our 2014 audit, the Program's investment component had an investment threshold of $3 million. That component was closed in October 2015. The Program's new corporate investment component, launched in December 2015, requires a minimum $5 million investment. The Ministry hopes that this increased investment threshold will help to discourage passive investing (that is, investors who put money into a business but are not actively involved in managing it).

- *explore advertising Program criteria in media that reach ethnic groups that commonly use the Program, and monitor such media for questionable advertisements relating to the Program.*
  Status: Will not be implemented. The Office of the Auditor General continues to support the implementation of this recommendation.

Details

At the time of this follow-up, the Ministry had not explored advertising Program criteria in media that reach ethnic groups. Instead, the Ministry informed us that it contracts a media monitoring firm to provide summaries of news stories in Ontario that are related to the Program, including those targeting ethnic groups and in languages other than English and French. At the time of this follow-up, the Ministry indicated that its approach is to ensure that its website contains current Program information, but that it would be challenging to monitor advertisements in local ethnic media to ensure that Program information is accurately advertised to potential applicants.

Detecting Misrepresentations and Fraud

Recommendation 8

To enhance the effectiveness of its program integrity unit in ensuring the quality of nomination decisions, the Ministry of Citizenship, Immigration and International Trade should:

- *implement the program integrity framework and action plan, taking into consideration best practices in other jurisdictions;*
  Status: In the process of being implemented by March 2018.

Details

During our 2014 audit, the Ministry began developing a program integrity framework. At the time of this follow-up, the Ministry was working on the framework to include best practices from other jurisdictions and to incorporate a regulatory framework in preparation for the proclamation of the *Ontario Immigration Act*, expected by March 31, 2018.

- *use risk indicators to identify high-risk files for further review;*
  Status: Fully implemented.

Details

In January 2013, the Program's integrity unit developed a screening tool to help processing officers make consistent decisions on whether a file should be referred to the integrity unit for further review. During our 2014 audit, Program staff informed us that the tool had been used for a short time but had been discontinued because management felt that its use slowed down processing time. After our audit, in June 2015, Program staff began using an assessment tool meant to support risk management by identifying high-risk files for reasons such as having had past denials for misrepresentation or having a representative who had misrepresented in the past. The Program's integrity unit also provided training in March 2015 to help staff identify when further review may be required.

- *clarify under what circumstances processing staff should refer files to the program integrity unit.*
  Status: Fully implemented.

Details

The operating manual in place at the time of this follow-up outlined instances when processing staff should refer files to the Program's integrity unit for further verification. Examples of these instances included finding a suspected or confirmed misrepresentation and past instances of misrepresentation by the applicant, the employer, or the representative on the file. Processing staff may also refer files to the integrity unit if they suspect a conflict of interest or if the applicant provides conflicting information.

Recommendation 9

To ensure that appropriate and timely action is taken regarding possible immigration fraud, the Ministry of Citizenship, Immigration and International Trade should:

- *obtain an interpretation of the privacy legislation from the Office of the Information and Privacy Commissioner of Ontario to confirm what matters can be disclosed to the federal government and law enforcement agencies when instances of misrepresentation or fraud are detected or suspected;*
  Status: Fully implemented.

Details

Our 2014 audit found that the Ministry did not always disclose information to the federal government and law enforcement agencies in instances of detected or suspected misrepresentation or fraud because the Ministry was concerned that doing so might contravene the *Freedom of Information and Protection of Privacy Act*. After our audit, the Ministry in December 2014 consulted with government privacy experts, including the Office of the Information and Privacy Commissioner of Ontario, to clarify its scope of authority to share personal information with law enforcement agencies when instances of misrepresentation or fraud are detected or suspected. Staff from the Office of the Information and Privacy Commissioner of Ontario indicated to the Ministry that an institution is permitted to disclose personal information to a law enforcement agency if that information is necessary for the purpose of enabling a law enforcement agency to determine whether to undertake an investigation.

- *file formal complaints with law enforcement agencies, including the RCMP, and any applicable regulatory bodies as soon as it has evidence of potential immigration fraud.*
  Status: In the process of being implemented by March 2018.

Details

At the time of this follow-up, the Ministry had not developed formal information-sharing agreements with law enforcement agencies and regulatory bodies. Although the Ministry met with the Ontario Provincial Police (OPP) in March 2015 to identify a referral process for individuals of concern, the Ministry was still working on formalizing agreements and protocols at the time of this follow-up. The Ministry expected to have a protocol for referring cases to the OPP by October 2016. The Ministry also indicated that the proclamation of the *Ontario Immigration Act*, expected by March 31, 2018, will enable it to develop information-sharing agreements with relevant partners such as the Immigration Consultants of Canada Regulatory Council, which is responsible for overseeing immigration consultants who practise in Canada.

Case Processing System

Recommendation 10

To ensure that the Provincial Nominee Program maintains accurate and reliable program data, the Ministry of Citizenship, Immigration and International Trade should:

- *implement system controls to restrict access to specific functions only to those with the authority to make decisions;*
  Status: Fully implemented.

Details

In January 2013, the Ministry implemented a computerized case management system to store applicant information, key documents and case decisions. In our 2014 audit, we noted significant data integrity issues in the system, including a lack of restriction on access to specific functions. This meant that any users, regardless of their role within the Program, could input decisions, change assessment status, and print nomination certificates. In July 2015, the Ministry updated the system to restrict access to specific functions to those with the authority to use them.

- *withdraw access rights immediately when staff end employment;*
  Status: Fully implemented.

Details

During our 2014 audit, we found that four staff members who had left the Program still had access rights to the case management system. At the time of this follow-up, the Ministry informed us that it had removed the rights of all individuals who were no longer employees of the Program and had begun removing rights immediately after an individual has left the program.

- *restrict changes to case decisions after they are made;*
  Status: Fully implemented.

Details

As previously noted, one use of the case management system is to store case decisions. Our 2014 audit found that any staff member with access to the system could make changes even after a decision had been reached. At the time of this follow-up, the Ministry had not restricted access with regard to making changes to case decisions. Instead, the Ministry established a process in March 2015 where the program manager and the integrity unit are notified by email whenever a change is made in the case management system after a decision has already been made. The notification contains the date, the time, and the name of the individual making the change.

- *enhance input validation checks for selected fields to ensure that only reasonable data is accepted;*
  Status: Fully implemented.

Details

Our 2014 audit found that the case management system contained incomplete and inaccurate data because it did not have the ability to conduct input validation checks. In April 2016, the Ministry implemented upgrades to the system that allow the system to automatically conduct input validation checks.

- *identify and implement useful exception reports that program staff have requested;*
  Status: In the process of being implemented by March 2017.

Details

During the implementation phase of the Ministry's case management system, Program staff identified a number of system reports that they would like to have. One such report would indicate how many files met service timeline standards, but at the time of our 2014 audit, the case management system did not produce this report. As well, we found in our 2014 audit that the system did not produce exception reports identifying files on which changes had been made after they were closed or files with representatives who had previously misrepresented information. At the time of this follow-up, the Ministry had updated the case management system to detect the first of those two risks; to address the second, the Ministry had begun developing a system function to flag applications of concern, which could include representatives who had previously misrepresented information. As well, the Ministry

informed us that, as a result of upgrades it made in April 2016 to the case management system, the system can now generate an exception report identifying missing information in an application, such as a name, an employer's address or a case decision.

- *reinforce with staff the importance of not transmitting information on immigrant files to personal email accounts.*
  Status: Fully implemented.

Details

In our 2014 audit, we noted instances where information on immigration files was emailed from the government email system to a Program employee's personal email account, posing a risk of unintentional disclosure of personal information. After our audit, in November 2014, the program director sent all staff a memo emphasizing that it is unacceptable to use personal information technology resources to conduct government business and referred staff to the government's Acceptable Use of Information and Information Technology Resources Policy. The memo also asked all staff to complete an online tutorial to reinforce their understanding of their role as public servants in Ontario. The Ministry also reminds staff through an automatic system notification when they log in to their computers of the Acceptable Use of Information and Information Technology Resources Policy and the Information Security and Privacy Classification Policy.

Nomination Certificates

Recommendation 11

To ensure that nomination certificates are issued and revoked as appropriate and only approved nominees are forwarded to the federal government for further immigration screening, the Ministry of Citizenship, Immigration and International Trade should:

- *establish a functionality in its case management system to allow staff to generate a list of all approved nominees to be submitted to the federal government;*
  Status: Fully implemented.

Details

In our 2014 audit, we noted that although the Program's case management system holds data on all approved nominees and is used to generate nomination certificates, it was unable to produce a list of certificates issued to be sent to the federal government. After our audit, the Ministry updated the Program's case management system, so that it can now automatically generate a list of approved nominees. The Ministry informed us that it generates this report monthly and compares it to a manual tracking spreadsheet to ensure that any discrepancies are addressed and that only approved nominations are captured. Once the correct numbers are confirmed, an encrypted report is sent to Immigration, Refugees and Citizenship Canada.

- *strengthen internal controls, including segregating the duties of staff who generate nomination certificates from those who add new nominee application records to the case management system;*
  Status: Fully implemented.

Details

Our 2014 audit found that anyone with access to the Program's case management system could create a nominee record, generate a nomination certificate and add a name to a list of nominees provided to the federal government. The Ministry updated the case management system in July 2015 so that only certain staff designated by the manager can generate nomination certificates; they cannot create files. This update also prevents staff who can create files, assess applications or make decisions from generating nomination certificates.

- *notify the federal government promptly after making a decision to issue or withdraw a nomination;*
  Status: Fully implemented.

Details

In our 2014 audit, we found that nomination withdrawal certificates were not always communicated with the federal government promptly after a decision was made. At the time of this follow-up, the Ministry was notifying the federal government on a monthly basis of any decisions to issue or withdraw a nomination.

- *maintain an accurate record of when nominations issued and withdrawn are communicated to the federal government.*
  Status: Fully implemented.

Details

In our 2014 audit, we found that the Ministry did not always have a record of when nomination withdrawals were communicated to the federal government. At the time of this follow-up, the Ministry informed us that it maintains a record of when it communicates to the federal government about nominations issued and withdrawn.

Post-Nomination Monitoring and Program Evaluation

Recommendation 12

To ensure that post-nomination monitoring efforts are effective, the Ministry of Citizenship, Immigration and International Trade should:

- *use findings from investigations regarding misrepresentation and fraud to educate processing staff and improve due-diligence processes;*
  Status: Fully implemented.

Details

In 2013, Program integrity staff conducted follow-ups on a number of approved nominees who had become permanent residents and found that 38% of the sampled nominees were suspected to have misrepresented themselves. Program management requested that these results not be shared with processing staff, resulting in a missed opportunity to educate staff and enhance due-diligence processes. In March 2015, the Ministry delivered Program integrity training to all processing staff. The Ministry advised us that this training incorporated findings from investigations undertaken by the Program's integrity unit. The Ministry indicated that it plans to conduct another Program integrity training course in July 2016 and that all processing staff and Program integrity staff will be required to attend that course.

- *define the scope of monitoring that should occur after investment projects are approved;*
  Status: Fully implemented.

Details

The Ministry closed the investment component in October 2015 and launched two new business components in December 2015. These new business components require applicants to sign a two-year performance agreement outlining commitments that must be met before the applicant qualifies for nomination. The Ministry informed us that Program staff will monitor these applicants every six months to ensure that they are meeting the commitments outlined in the performance agreement and will continue to monitor these applicants for a further three years after the applicant attains permanent resident status.

- *require that assessing ministries monitor at set intervals using prescribed methods (such as obtaining audited financial statements and conducting site visits) to verify information received;*
  Status: In the process of being implemented by March 2017.

Details

The Ministry closed the investment component in October 2015, but at the time of this follow-up, partner ministries were still assessing investor files that had previously been referred to them. According to the Ministry, these ministries have committed to clearing the existing inventory of applications. When the component existed, the Ministry had not prescribed time intervals and monitoring methods to assessing ministries; instead, it allowed the assessing ministries to use methods at their

own discretion. Now that the component is closed and no new investment files need to be referred to assessing ministries, the Ministry initially saw limited value in prescribing monitoring methods for the remaining inventory of applications that were already being assessed by these assessing ministries. Its position changed in August 2016, when it requested assessing ministries to implement a quarterly schedule for monitoring that includes providing the Ministry with the results and supporting documentation. The Ministry informed us that assessing ministries monitor projects 12 months after endorsement using such methods as reviewing copies of leases and staff job descriptions, and obtaining status updates on the investor and worker nominees.

- *request copies of the results of assessing ministries' monitoring activities and follow up when they are overdue;*
  Status: In the process of being implemented by March 2017.

Details

At the time of this follow-up, seven endorsed investor files were still being monitored; three were with the Ministry and four were with assessing ministries. In August 2016,the Ministry requested assessing ministries to keep it informed on a quarterly basis of the results of their monitoring activities.

- *consider nominating investment component applicants only after they have demonstrated that they have met project commitments, as is done in British Columbia.*
  Status: Fully implemented.

Details

The Ministry closed the investment component in October 2015 and launched two new business components in December 2015. These two new business components require a nominee applicant to sign a performance agreement outlining commitments for a two-year period. Examples of possible commitments include financial investments and job creation. Applicants can qualify for nomination only after meeting the commitments outlined in the performance agreement.

Recommendation 13

To ensure that the Provincial Nominee Program is effective in selecting individuals who are likely to be an economic benefit to the province, the Ministry of Citizenship, Immigration and International Trade should:

- *obtain nominee information, such as provincial health insurance and driver's licence numbers, to help follow up on the outcomes for landed nominees;*
  Status: Little or no progress.

Details

After our 2014 audit, the Ministry consulted government privacy experts and determined that collecting personal information, such as provincial health insurance and driver's licence numbers, and using that information to follow up on the outcomes for nominees who became permanent residents would be problematic under existing legislation. However, the *Ontario Immigration Act*, if proclaimed, could give the Ministry an opportunity to explore the possibility of collecting driver's licence information for the purpose of administering its nomination program, subject to consultation and agreement with the Ministry of Transportation and the Information and Privacy Commissioner. The Ministry further noted that current privacy legislation restricts its ability to use health-card data to help follow up on the outcomes for landed nominees. But it is worth noting that in our *2014 Annual Report*, we reported that one province used health-card data to track permanent residents.

- *evaluate whether nominees without job offers who were selected based on their higher education have become economically established in Ontario;*
  Status: Fully implemented.

Details

After our 2014 audit, the Ministry commissioned a marketing research company in 2015 to conduct an assessment of nominees without job offers to see if they had become economically established in Ontario after attaining permanent resident status. The assessment, completed in December 2015, found that 89% of individuals nominated without job offers were employed within a year of becoming permanent residents.

- *establish performance indicators for each program component and for assessing fraud-detecting activities, including those recommended by federal-provincial-territorial working groups, and collect and analyze the required information.*
  Status: Fully implemented.

Details

The Ministry informed us that the federal-provincial-territorial working group on provincial nominee programs across Canada had approved a framework for common performance indicators in February 2016. The Ministry also indicated that it was collecting common program integrity indicators—such as nominee approval rates and the number of refusals due to documented fraud or misrepresentation—and reporting these indicators annually to Immigration, Refugees and Citizenship Canada. The Program was also internally tracking information related to fraud-detecting activities, including the use of site visits and in-person interviews.

Fee Revenue

Recommendation 14

To ensure that appropriate user fees are charged and the established amounts are collected, the Ministry of Citizenship, Immigration and International Trade should:

- *establish processing fees that recover the full cost of the Program;*
  Status: In the process of being implemented by April 2017.

Details

The Ministry indicated that it will be analyzing the fees associated with the new and existing Program components over the course of 2016 to determine whether they are fully recovering Program costs. The Ministry expects to complete this analysis by April 2017.

- *consider implementing a processing fee for employers;*
  Status: In the process of being implemented by April 2017.

Details

At the time of this follow-up, the Ministry had not yet implemented a processing fee for employers. The Ministry indicated that it will determine whether a processing fee for employer applications is necessary once it has finished analyzing the 2016 processing fees.

- *reconcile fees collected to revenue recorded in the financial system on a regular basis.*
  Status: In the process of being implemented by December 2016.

Details

In our 2014 audit, we detected a number of errors in the Ministry's tracking sheet of revenue, including duplicate receipt entries and data entry errors. At the time of this follow-up, the Ministry informed us that it had assigned responsibilities for reconciling fees collected with revenue recorded in the financial system to a staff member and that this work was being undertaken on a monthly basis. However, at the time of our follow-up, we found that the reconciliation work was about six months behind. The Ministry subsequently informed us that it had devoted additional resources to ensure that reconciliation is completed in time.

Ministry of Community and Social Services

Residential Services for People with Developmental Disabilities

Follow-Up on VFM Section 3.10, *2014 Annual Report*

RECOMMENDATION STATUS OVERVIEW					
	# of	Status of Actions Recommended			
	Actions Recommended	Fully Implemented	In Process of Being Implemented	Little or No Progress	Will Not Be Implemented
Recommendation 1	1		1.0		
Recommendation 2	1		1.0		
Recommendation 3	3		2.0	1.0	
Recommendation 4	1		1.0		
Recommendation 5	5		3.5	1.5	
Recommendation 6	5	3	1.0	1.0	
Recommendation 7	1				1
Recommendation 8	2	1		1.0	
Recommendation 9	4	1	2.0	1.0	
Recommendation 10	4		3.0	1.0	
Recommendation 11	4	1	3.0		
Total	**31**	**6**	**17.5**	**6.5**	**1**
%	**100**	**20**	**56**	**21**	**3**

Background

The Ministry of Community and Social Services (Ministry) funds residential and support services for people with developmental disabilities to help them live as independently as possible in the community. The Ministry funds two kinds of residential services for children (group homes and associate living similar to foster care), and five types for adults (ranging from supported independent living to intensive-support residences that provide 24-hour care). About 18,300 people received residential services in the 2015/16 fiscal year (17,900 in 2013/14, of which 98% were adults). Another 14,900 adults were on a wait list at year's end (14,300 in the 2013/14 fiscal year).

In 2015/16, the Ministry paid a total of $1.3 billion to 236 not-for-profit community agencies that operated nearly 3,000 residences that provided residential and support services to people with developmental disabilities ($1.16 billion in 2013/14 to 240 agencies to operate nearly 2,100 residences).

Of this total, 97% was for adult services (similar to 2013/14). The Ministry, through regional offices, is responsible for overseeing program delivery for most residential services by agencies. Children's residential services are overseen primarily by the Ministry of Children and Youth Services.

In our *2014 Annual Report*, we noted that during the previous four years, the number of Ontarians with developmental disabilities receiving provincial services and supports grew only 1% to 17,900, while spending on those services and supports rose 14% to $1.16 billion. A portion of this funding increase was intended to accommodate 1,000 more people over four years, but only 240 more were being served by the end of the third year. As such, program costs were increasing faster than the number of people served. As well, as of March 31, 2014, the number of people waiting for services was almost as high as the number of people who had received services in the previous 12 months.

In 2004, the Ministry began work on a comprehensive transformation of developmental services in Ontario; however, the project was still unfinished at the time of our 2014 audit. We reported that the Ministry had made some progress by, for instance, establishing Developmental Services Ontario as a single access point for adult developmental services.

Some of the most significant findings of our 2014 audit were as follows:

- From 2009/10 to 2013/14, the number of people waiting for adult residential services increased 50% while the number served increased only 1%. We calculated that it would take 22 years to place everyone who was waiting for a residence at the time of our audit, assuming no one else joined the list.
- Eligibility and needs assessment of applicants had improved, but the Ministry still needed to complete the development of a consistent and needs-based prioritization process. People with the highest priority needs were not usually placed first because residential services placements went to people who were the best fit for the spaces that became available, rather than to those who were assessed as having the highest priority needs.
- The Ministry needed to revise funding methods to link residential funding to residential level of care needs. Ministry funding to service providers was based on what the providers received in previous years, rather than on the level of care they needed to provide the people they were serving. A new funding method based on a reasonable unit cost for services by level of care could lead to savings that would allow more people on wait lists to be served.
- We found wide variations in the cost per bed or cost per person across the system for 2012/13. We calculated the cost per bed for adult group homes ranged from $21,400 to $310,000 province-wide. We also found large variances within regions. The Ministry was unable to explain the variances.
- About 45% of adult residences had not been inspected since 2010. Inspections typically included a review of agency policies and procedures, board documents, and staff and resident records, in order to assess the physical condition of a residence, the personal care provided to residents, the management of residents' personal finances, and whether the residence has a fire safety plan. For those inspections conducted, we found that issues were not being followed up on or resolved in a timely manner. The results of residence inspections were not made public.
- Ontario had few care standards and they were general in nature and open to interpretation.
- The Ministry did not have meaningful performance indicators to assess the quality of residential care provided.
- The Ministry created the Developmental Services Consolidated Information System database in 2011 to combine existing client information maintained by the various service providers. However, there were problems with

the accuracy and completeness of the wait management data within the system.

- The segregation of roles between the Ministry of Community and Social Services and the Ministry of Children and Youth Services regarding children's residential services was confusing: one ministry was responsible for contracting, funding and managing the relationship with service providers and another ministry was responsible for handling complaints, and licensing and inspecting those service provider premises. Confusion could arise over who was accountable for the overall delivery of children's residential services. As well, there was no consistent single access point for children's residential services.

We made a number of recommendations for improvement and received commitments from the Ministry that it would take action to address them.

Status of Actions Taken on Recommendations

The Ministry of Community and Social Services provided us with information in the spring and summer of 2016 on the current status of our recommendations. According to the information provided, 76% of our recommended actions have either been fully implemented or progress had been made on implementing them. Little progress was made on 21% of our recommended actions—ones that pertained to wait management, inspection of residences, and oversight of financial reporting. Specifically, the Ministry still has a lot of work to do in the areas of establishing a reasonable length of time for a person to accept or decline a placement offer and move in, expanding inspection procedures to include verification of service data and compliance with government directives for the broader public sector, requiring regular Canadian Police Information Centre and vulnerable sector screening of people providing direct care to individuals with developmental disabilities, and providing guidance on expenditure data to be included in audited financial information submitted by service providers. One of the recommendations will not be implemented. This pertains to establishing benchmarks for standards of care, which we continue to believe should be implemented to ensure that all residents receive at least a minimum standard of care.

The status of the actions taken on each recommendation is described in the following sections.

Program Funding, Expenditures and Performance Measures

Recommendation 1

To ensure that funding for residential services and supports for people with developmental disabilities is equitable and tied to the level of support required by individuals in care, the Ministry of Community and Social Services should establish a funding model based on the assessed needs of people requiring services.

Status: In the process of being implemented by March 2019.

Details

At the time of our follow-up, the Ministry was developing a framework to allocate funding based on individuals' assessed needs and risk. The Ministry had met with stakeholders and experts, and had commissioned an independent consulting firm to review funding methods in other jurisdictions. The consultant's report noted a trend away from the practice of historically based funding to the creation of budgets in which funding is tied to the outcome of a standardized needs assessment. Alberta currently has and Manitoba is developing such funding models for their programs supporting people with developmental disabilities.

The Ministry has developed a draft funding formula that applies a weighting factor to each element of daily activity support needs, medical and behavioural risks, and other risks (such as, whether the person is able to understand spoken language

or requires overnight assistance) to arrive at the estimated hours of support needed. The Ministry has yet to conduct a case study to test and finalize the funding model. The Ministry plans to implement the new funding model in phases, starting on April 1, 2018, and concluding by March 2019.

Recommendation 2

The Ministry of Community and Social Services should review performance measures used in other jurisdictions to evaluate residential services provided to vulnerable people and, where appropriate, adapt these to develop relevant performance measures for residential services for people with developmental disabilities.

Status: In the process of being implemented by June 2017.

Details

At the time of our audit in 2014, we found that the Ministry did not have performance indicators that could be benchmarked, measured and reported on. In addition, we found that information collected from service providers measured only output, not outcomes.

As part of its Data Analytics and Evaluation Strategy, the Ministry plans to develop client-outcome and system-level performance measures to continually improve service quality and achieve long-term strategic objectives. In January 2016, the Ministry identified what a performance measure framework should include and what other jurisdictions are doing. It looked at quality-of-life measures used by programs that provide service to people with developmental disabilities in Alberta and British Columbia, and national indicators established by the United States.

In February 2016, the Ministry began consultations with service providers on performance indicators. Examples of performance indicators being considered by the Ministry include the percentage of people with developmental disabilities who engage in regular community activities, who report that they have choice in where they live, who report feelings of belonging, and who find employment if they so desire.

The Ministry informed us that it has yet to conduct a gap analysis to identify whether new data is needed, and hadn't yet established a baseline measurement for selected indicators. The Ministry plans to have performance indicators developed and a gap analysis completed by June 2017.

Accessing Residential Services

Recommendation 3

To ensure that services are administered consistently and equitably, and that those most in need receive required services, the Ministry of Community and Social Services should:

- *complete timely needs assessments for all eligible individuals waiting for residential services;*
  Status: Little or no progress.

Details

We calculated that in 2013/14 it took an average of almost seven months from the time an application was received until a needs assessment was completed, the majority of this time being after eligibility had been confirmed.

To address this, the Ministry invested $3.5 million in additional funding to the nine Developmental Services Ontario access centres to hire a total of 37 new assessors. These people were hired by September 2015.

As well, the Ministry has developed a new reporting template through which data will be collected to allow the Ministry to monitor assessor capacity and productivity by access centre. Beginning March 2016, access centres were required to report on a monthly basis the number of assessors on staff and on a quarterly basis the number of assessments completed. According to Ministry data, there was a 20% increase in the number of needs assessments completed in the 2015/16 fiscal year compared to 2014/15. Although the Ministry does not track how long it takes to complete a needs assessment from

the time an application is received, it has measured wait times based on the time between eligibility confirmation and completion of an assessment. Based on the Ministry's internal reporting, the time between confirmation of eligibility and assessment completion has gotten progressively worse over the last three years. The average time in 2013/14, 2014/15 and 2015/16, respectively, was 6.4 months, 10.2 months and 11.9 months. The Ministry stated that assessments are completed for high-priority individuals first and that the majority of new applicants (over 60%) have an assessment completed within six months.

- *develop a consistent prioritization process across the province; and*
  Status: In the process of being implemented by September 2017.

Details

The Ministry developed the Provincial Prioritization Tool in April 2014 to help identify people with developmental disabilities who were most urgently in need of services/funding. This tool was implemented for use in 2014/15 in the Passport Program, which provides self-directed funding to adults with developmental disabilities to enable them to participate more fully in the community.

The Ministry has conducted evaluations of this tool to see if it could be used in other programs for people with developmental disabilities, including residential services. In 2014, the Ministry compared prioritization scores using the tool with the service needs ratings from assessments conducted by access centres, and found lower than expected agreement between prioritization scores and service needs. In 2015, the Ministry compared scores using the tool on the risk of adverse outcomes with the ratings from assessments conducted by access centres. Although it found a better correlation of results than in the 2014 analysis, it was still lower than expected. The Ministry determined that additional work is required before the tool can be used for prioritizing applicants for residential services. The Ministry plans to implement the prioritization tool for use in the residential services program by September 2017.

- *validate all information in the Developmental Services Consolidated Information System.*
  Status: In the process of being implemented by March 2017.

Details

Prior to 2011, service providers maintained client data in their own systems. In 2011, the Ministry launched the Developmental Services Consolidated Information System (DSCIS) database to maintain in a centralized system personal and service details about every adult with a developmental disability who requested or received services or supports. At the time of our audit three years later, the Ministry had not yet finished validating the data entered into the system, either for those receiving services or those waiting for services.

The Ministry's latest data validation efforts of information for individuals receiving residential services was conducted in July 2013. At that time, the Ministry confirmed that the scope of the data validation did not address completeness, accuracy or authenticity of the DSCIS data, but rather focused on other issues within the system which allowed for incorrect data to be present.

The Ministry told us that DSCIS data validation of the residential wait list began in the fourth quarter of 2014/15. Each quarter, access centres provide the Ministry with a list of people waiting for services. Data validation may include reconciling clients' information across other data sources. This process is completed via teleconference and email with access centres based on specific data issues that arise when the Ministry is consolidating the data for provincial reporting. As of March 2016, about 14,900 people were waiting for residential services and 11,980 (or 80%) of those had had an assessment completed to validate their information in the system.

Recommendation 4

The Ministry of Children and Youth Services should develop a policy that is applicable to all children's residences that are funded by the government of Ontario. This would include implementing a consistent access mechanism and wait-list management process across the province for residential services for children and youth with developmental disabilities.

Status: In the process of being implemented. The Ministry of Children and Youth Services will have a plan developed by spring 2017, but is unable to provide a date for full implementation of the plan.

Details

Although both the Ministry of Community and Social Services and the Ministry of Children and Youth Services fund residential services for children with developmental disabilities, access to these services is managed by the latter.

In July 2015, the Ministry of Children and Youth Services established a Residential Services Review Panel to review child and youth residential services in Ontario across all sectors (e.g., child welfare, mental health, youth justice and complex special needs). The panel's mandate was to build on the foundational work of previous reviews and reports to government, and to provide advice on what is needed going forward to improve residential services for children and youth. The panel had discussions with key stakeholders, including youth with experience in residential services, foster parents, service providers, front-line workers, provincial associations, and the Provincial Advocate for Children and Youth. In February 2016, the panel submitted its final report with 33 recommendations to the Ministry of Children and Youth Services. With regards to access, the panel recommended the following:

- The Ministry should create one unified, integrated governance structure within the Ministry (a Quality of Residential Care Branch/Division) to provide systematic oversight and accountability for all residential services through mechanisms that focus on the foundation and elevation of quality of care. The new structure is envisioned as having four core components: a quality inspectorate; a data analytics reporting unit; a continuity of care unit; and an advisory council.
- The placement of young people in a residential service should be based on a match between the needs and strengths of the young person, and the strengths and demonstrated capacities of the various program service providers.
- A centralized, publicly accessible, web-based directory of all licensed service providers in the province should be created to maximize opportunities for system planning, placement decisions and oversight of residential services.

The Ministry of Children and Youth Services informed us that it will be developing a plan for the reform of child and youth residential services, which it expects to have completed by spring 2017. The plan is to encompass the recommendations of the panel and is expected to focus on improving the quality of care for children and youth, and enhancing oversight and licensing requirements in residential settings. As well, the plan will focus on data and analytics to inform decision-making at all levels. According to the Ministry, it is too early in the process to know when implementation of the plan will be completed.

Wait Management

Recommendation 5

To improve the management of wait times for residential services for people with developmental disabilities, the Ministry of Community and Social Services should:

- *promote consistent recording of wait information, including tracking both wait times and wait lists;*

  Status: In the process of being implemented by June 2017 for wait list information only. But little or no progress on tracking wait times for residential services.

Details

The Ministry stated that improvements were being developed in its Developmental Services Consolidated Information System (DSCIS) database that are expected to address data quality, including tracking wait list information, but not wait times. Specifically, work is continuing to expand system capacity and enable access centres to match clients to available resources identified by service agencies. The Ministry's design includes a new web-based information-sharing portal through which service agencies will provide information to access centres on available services and supports. The portal, which feeds into the system, will also be used by access centres to share information about people who are identified as potential matches for available services and supports so they can be linked up with those agencies.

At the time of our follow-up, the Ministry had consulted with access centres on training and data migration to help plan implementation. As well, the system had been demonstrated to key internal and external stakeholders. The information system improvements are expected to be implemented by June 2017.

At the time of our follow-up, the Ministry did not have accurate and reliable information regarding wait times for residential services.

- *establish guidelines for the length of time an applicant may take to accept a placement, and then to move in;*
  Status: In the process of being implemented by March 31, 2018.

Details

At the time of our audit, we noted that the average time to fill a vacancy in 2013/14 ranged from 92 to 128 days. We also noted there were no mandated timeframes for an applicant to accept a placement offer, or for when they must move in after accepting.

The Ministry revised its vacancy management guidelines in 2016. The revised guidelines, which took effect at the start of 2016/17, state that under ideal circumstances, the goal is to have vacancies remain open for less than 90 calendar days. This period should include the time it takes for a person to accept a proposed residential placement and begin the transition into their new home. For residential resources that remain available for 90 days or longer, details are to be provided in a quarterly residential resource report to the Ministry that documents the circumstances contributing to the length of time.

The revised guidelines do not adequately address the need to shorten the time to fill a vacancy. The time period under the Ministry's new guideline is considerably longer than that required for a long-term-care home vacancy, where a person has 24 hours to accept or decline a placement offer and must move in within five days of the offer. Furthermore, under the old guidelines, the Ministry required agencies to provide an explanation when a vacancy had not been filled within 60 days; this has now been extended to 90 days. The Ministry's average to fill a vacancy in the first quarter of 2016/17 was 81 days. The median was 65 days. The Ministry plans to revisit its target of 90 days in 2017/18.

- *consider making wait times public to increase transparency and accountability;*
  Status: Little or no progress.

Details

The Ministry told us that because people with developmental disabilities are prioritized for residential services according to their unique needs and risk factors rather than by how long they have waited for these services, the Ministry and service providers did not want to make wait time information public until a more transparent mechanism was established. The Ministry informed us that it is continuing to work with the sector to publicly report information on average wait times to receive specific services.

- *assess, on the basis of the needs of individuals on the wait list, what the mix of residential service*

types should be, to enable those with the highest needs to be placed first, as practical, in the future; and

Status: In the process of being implemented by March 2017.

Details

In December 2015, the Ministry completed the first phase of a strategy for using a multi-year approach to residential planning. This phase involved collecting information from community planning tables on the highest-priority people waiting for services. In addition, service providers will be permitted to repurpose and combine vacancies to serve more or higher-needs people.

The Ministry found that regional offices and access centres identified almost 1,500 people as highest priority for residential services over the next two years. The most common type of residential setting required was group homes (61%), followed by supported independent living, host family residences (similar to foster care) and intensive support residences. The residential setting required for 10% of those identified as highest priority was unknown.

The Ministry is planning to place 1,400 high-priority individuals within the next two years.

- *use the Developmental Services Housing Task Force to develop alternative housing solutions to alleviate demand as quickly and cost-effectively as possible.*

  Status: In the process of being implemented by September 2018.

Details

The Developmental Services Housing Task Force (Task Force) was established in September 2014, with a mandate to, among other things:

- develop a framework for capacity-building projects and identify and recommend demonstration or research projects for government investment and evaluation beginning in 2015;
- develop and compile web-based resources to help individuals and families get information, network, collaborate and support each other in exploring and creating successful housing solutions; and
- provide a report to government with recommendations related to housing for people with developmental disabilities.

The Task Force established a Facebook group, and worked with connectability.ca to develop a library of online resources for innovative housing ideas, including online resources for individuals and families and a library of resource material with examples of innovative housing solutions.

A request for proposals for innovative housing solutions was posted publicly on the Ministry's website in Spring 2015. The Ministry received 80 submissions, which were reviewed and scored by the Task Force, resulting in 12 projects recommended and approved by the Ministry for $3.47 million over two years. These projects are expected to provide residential services for 67 people.

A second request for proposals of housing solutions was posted publicly on the Ministry's website in December 2015. The Ministry received 69 submissions and six projects were selected and approved at a cost of $2.13 million over two years. These projects are expected to provide residential services for 46 additional people. Summaries of the details of the selected projects from both requests for proposals are available on the Ministry's website. Although this is a good start, the number of people expected to be housed (113) is a very small portion of those currently waiting for residential services (14,900 in total, of which 1,500 were high priority).

According to the Ministry, the Task Force will be in place until September 2018.

Quality of Service Providers

Recommendation 6

To help ensure that inspections of residences contribute to the safety and security of the environments where people with developmental disabilities live, the Ministry of Community and Social Services should:

- *continue to use a risk-based approach and set a maximum time allowed before lower-risk residences need to be inspected;*
  Status: Fully implemented.

Details

At the time of our 2014 audit, 45% of about 2,100 adult residences had not been inspected since 2010.

As part of a new compliance framework for inspections released by the Ministry in February 2016, the Ministry has committed to conduct annual reviews of agencies, during which a number of residential sites will be inspected each year. As part of this framework, the Ministry has also committed to inspect each lower-risk residential site at least once every five years, whereas higher-risk residences are to be inspected more often based on identified risks (e.g., serious occurrence reports, complaints to the Ministry and last inspection date).

- *conduct unannounced inspections;*
  Status: Fully implemented.

Details

According to Regulation 276/10 under the *Services and Supports to Promote the Social Inclusion of Persons with Developmental Disabilities Act, 2008*, the Ministry may only conduct unannounced inspections where there are grounds to believe the agency has misappropriated funds, or there is an immediate threat to the health, safety and well-being of a person receiving services and supports from the service agency.

In March 2016, through the Ministry's Serious Occurrence Reporting Process, the Ministry implemented a protocol for conducting unannounced inspections in response to reported health and safety concerns or misappropriated funds. This has resulted in three additional unannounced inspections to date.

The Ministry also informed us that it is developing a team—comprised of representatives from the regional office, corporate compliance team and senior management—to plan investigation activities where there are allegations of health and safety concerns, and/or misappropriation of funds.

- *distinguish between the severity of non-compliance items and ensure appropriate and timely follow-up where significant issues are noted;*
  Status: Fully implemented.

Details

The Ministry developed a prioritization matrix in February 2016 that it has been using in its inspections to categorize the differing severity of non-compliance issues. A risk rating (of immediate, high, medium or low) is applied to each of the 280 inspection requirements, as well as timelines for corrective action by service providers based on level of risk. For example, for non-compliance that poses an immediate threat to the health, safety or well-being of a client, the service provider must correct the situation at the time of inspection or submit documentation that meets Ministry expectations confirming that the corrective action was taken within 24 hours. Further, the Ministry will not sign off on the inspection until it confirms that the service provider has addressed that immediate risk. For non-compliance rated as high risk, the Ministry requires corrective action within 10 business days. For non-compliance rated medium and low risk, service providers are allowed up to 40 days to take corrective action. If a service provider still does not comply, the Ministry may issue a notice that requires compliance within 14 days. Failure to rectify issues after this may result in the Ministry withholding future funding to the agency.

- *expand inspection procedures to include verification of service data reported to the Ministry, and test compliance with Broader Public Sector Expenses Directives on a sample basis; and*
  Status: Little or no progress.

Details

At the time of our follow-up, the Ministry had not adjusted its site inspection procedures to verify

service data or to test compliance with Broader Public Sector Expenses Directives, and had no plan to do so. The Ministry stated it would determine the current practices of regional offices and explore options to verify agency service data to address any significant anomalies or issues.

- *publish the results of inspection reports to increase the transparency and accountability of the process.*
  Status: In the process of being implemented by March 2017.

Details

Effective January 2016, the Ministry released a policy directive that requires service providers to post a hard copy of either their letter of compliance or non-compliance following annual inspection, within three business days of receiving it from the Ministry. The letter must be posted at or near the main entrance of the agency and be clearly visible to those who enter. These letters summarize the results of the inspection and indicate whether the service provider has met all requirements or not. In the case of a non-compliance letter, the areas requiring corrective action are identified.

Further, service providers are required to respond to queries or provide information on their current compliance status and the results of their ministry compliance inspections, to anyone who requests them.

However, at the time of our follow-up, the Ministry had no plans to publish on its website results of inspections on residences for people with developmental disabilities to allow quick access to comparative information.

Recommendation 7

To help ensure the well-being of people with developmental disabilities living in Ministry-funded residences, the Ministry of Community and Social Services should establish further standard-of-care benchmarks, such as staff-to-resident ratios and the minimum number of times a year that each resident should be seen by health professionals such as physicians and dentists.

Status: Will not be implemented. We continue to believe this recommendation should be implemented.

Details

The Ministry has said that because people with developmental disabilities have a wide range of needs—some need minimal support (e.g., for learning how to take public transportation independently or addressing personal issues as they arise) and others need intensive support (e.g., 24/7 support with all aspects of daily living, and to manage challenging behaviours, such as self-harm)—it is difficult for the Ministry to accurately set a standard for staff-to-client ratios that is meaningful and appropriate for people who live in developmental services settings or participate in other Ministry-funded programs.

Rather, the Ministry feels minimum standards are not needed because it already requires that funded service agencies develop an individual support plan for every person receiving services, and that these plans identify the community resources that may be required or accessed by the individual, including medical resources.

We continue to believe that this recommendation should be implemented to ensure that all residents receive at least a minimum standard of care.

Recommendation 8

To help ensure that people applying for developmental services have their support needs properly assessed, and that those living in residences funded by the Ministry of Community and Social Services receive quality services, the Ministry should:

- *ensure that all assessors and residential staff complete the required training; and*
  Status: Fully implemented.

Details

Although the Ministry has mandatory training requirements for access centre staff who assess

people's support needs and for agency staff who provide care, during our 2014 audit we found that some staff had not received all required training. In December 2015, the Ministry revised its policies to require Ministry staff to review the training records of all agency staff and volunteers to ensure they have completed all required training according to quality assurance measures and policy directives for service providers. Service providers found not complying with the training requirements must take immediate steps to do so.

According to Ministry records at the time of our follow-up, all access centre staff responsible for conducting needs assessments were up to date on their training requirements.

- *ensure that all residential staff who provide direct care to residents undergo regular vulnerable sector screenings and Canadian Police Information Centre checks.*

  Status: Little or no progress.

Details

During our audit in 2014, we noted that regulation 299/10 of the *Services and Supports to Promote the Social Inclusion of Persons with Developmental Disabilities Act* requires a background check through the Canadian Police Information Centre (CPIC), including vulnerable sector screening. This check is to be conducted before a person can be hired to provide direct care to people with developmental disabilities. However, neither the legislation nor Ministry policy requires that staff regularly update their CPIC checks, including vulnerable sector screening.

At the time of our follow-up, the Ministry informed us it was assessing the feasibility of requiring regular updates of vulnerable sector screenings and CPIC checks for agency staff. To this end, the Ministry had examined how often police records checks were required for people working in residential services for people with developmental disabilities in British Columbia, Alberta and Saskatchewan. The Ministry also reviewed practices in other sectors in Ontario in which people are working with vulnerable individuals (e.g., long-term-care homes, elementary and secondary schools, and child care). As well, the Ministry told us it had had preliminary discussions with selected internal and external stakeholders, but no meeting minutes were available for our review.

The Ministry said it is planning to review and update regulation 299/10, and, as part of that review, will consider whether any changes or additions are necessary.

Oversight of Service Providers

Recommendation 9

To help ensure the prudent use of government funds, and improve agency governance and accountability processes, the Ministry of Community and Social Services should:

- *ensure completion of all agency risk assessments;*
- *ensure completion of all action plans to correct deficiencies noted during risk assessments and annual attestation of compliance;*

  Status: In the process of being implemented by March 2017.

Details

Service providers must complete a risk-assessment questionnaire every two years that determines their ability to meet service delivery objectives. This self-assessment is reviewed by the Ministry. Where risks are identified, the Ministry requires the service provider to develop an action plan to mitigate those risks.

To help ensure that risk assessments are completed and identified deficiencies corrected, the Ministry has been developing a new transfer payment risk assessment process and tool, which includes a web-based application allowing for basic reporting, and will also provide staff with built-in alerts for monitoring whether there has been progress on correcting deficiencies. The Ministry

also informed us that monitoring is to be done at the regional office level and the Ministry's corporate office will receive a summary report indicating whether compliance has been achieved. As of August 5, 2016, the summary report showed that 31% of risk assessments required to be completed in 2015/16 had not yet been started by either the service provider or the Ministry, and no assessments had been fully approved or completed.

The Ministry indicated that the new processes being developed, to complete risk assessments and monitor progress on correcting deficiencies, will be fully implemented by March 2017.

- *conduct periodic independent verification to obtain assurance that agencies comply with the government's directives for the broader public sector; and*

  Status: Little or no progress.

Details

As noted earlier, the Ministry has no plans to independently verify that agencies are complying with the government's directives for the broader public sector.

As was the process at the time of our audit, the Ministry continues to require that each service provider agency complete and return to the Ministry an annual attestation signed by both its chief executive officer and the chair of its board that they have complied with the requirements of the *Broader Public Sector Accountability Act, 2010*, and its directives. The attestation is also to indicate corrective action it will take for any issues of non-compliance. Despite the attestation, at the time of our audit we found that many agencies indicated they were not in compliance, and the Ministry did not always follow up with the service providers to ensure that corrective action had been taken.

At the time of our follow-up, the Ministry had developed a preliminary draft guideline to support regional offices in reporting, following up and taking corrective action on issues of non-compliance, including those identified by service providers through their annual attestation. The Ministry informed us that it was working with the Treasury Board Secretariat to finalize the draft guidelines so they could be implemented. However, this would not address our recommendation for independent verification of compliance with government directives for the broader public sector.

- *encourage Ministry staff to attend agency board meetings.*

  Status: Fully implemented.

Details

The Ministry informed us that as a best practice, Ministry staff attend agency board meetings wherever possible. The Ministry further stated that its staff are reminded during their training sessions about the need to collaborate with agencies and attend agency board meetings.

Recommendation 10

In order to better hold agencies accountable for the residential services they provide to people with developmental disabilities, the Ministry of Community and Social Services should:

- *ensure that agencies submit all required data;*
- *periodically validate the accuracy of information submitted; and*

  Status: In the process of being implemented by March 2017.

Details

Agencies funded by the Ministry are required to report quarterly on expenditures and service levels, and to reconcile expenditures to funding received at year-end. Agencies are also required to explain significant variances from targeted amounts.

In February 2016, the Ministry developed a data integrity framework to address data quality issues and to outline the Ministry's approach to ensuring the quality and completeness of agency data. Specifically, the framework includes cross-checks against other sources (i.e., budgets submitted) and

identification of data anomalies (including missing data) through quarterly and annual variance reports, and year-over-year comparison or trends in key service data.

One staff member from each Ministry regional office was to be trained on using the software that supports the framework in September and October 2016. The Ministry expects to fully implement this recommendation by March 2017.

- *require that quarterly reports provide information for individual residences as well as for agencies, to enable better cost comparisons among entities providing similar services; and*
  Status: In the process of being implemented by March 2017.

Details

The Ministry's analysis of performance and service delivery was being done at the agency level, not at the individual residences. To conduct meaningful comparisons among residences of similar type and capacity, the Ministry established client service performance indicators and operational performance indicators. Client service indicators include number of clients served by level of support, number of clients served per full-time employee, annual hours each individual receives support from a care worker, and number of full-time employees per bed. Operational indicators include annual cost per person served, cost per day of care, cost per hour of support provided by a care worker, and administration-to-cost ratio.

To date, the Ministry has analyzed 10 agencies with high costs relative to other agencies offering the same type of residential service. Based on this analysis, the Ministry found that cost variances were due to poor or inconsistent administration of programs and services in six agencies, incorrect data in two agencies, and differences in business attributes or level of client service at one agency. The analysis of one agency was inconclusive. Based on this initial analysis, the Ministry has noted that robust financial monitoring and more detailed review of transfer payment agencies are needed. The Ministry said that, starting in March 2017, its program monitoring will include cost analysis of agencies on an ongoing basis.

- *provide guidance on useful expenditure data to be included in the audited financial statements and supplemental segregated financial information.*
  Status: Little or no progress.

Details

To confirm that funding is being used for its intended purpose, agencies must submit audited financial statements, supplemental financial information segregated by service provided, and a reconciliation of agency spending with the amount of Ministry funding provided. However, at the time of our audit in 2014, the reconciliation and supplemental information were not at the same level of detail to allow for verification of the breakdown of expenditures.

The Ministry informed us that the Transfer Payment Administrative Modernization Office at the Treasury Board Secretariat, which has a mandate to identify and implement efficiencies in the administration of transfer payments to organizations, was expected to begin working with the ministries of Health and Long-Term Care, Community and Social Services, and Children and Youth Services in late 2016 to develop a common year-end financial reconciliation process for transfer payment agencies. The proposed model included one summary statement of revenue and expenses and supporting documents, including an income statement breakdown for each funded program.

The Ministry informed us that the Transfer Payment Administrative Modernization Office may engage an accounting firm to propose model financial statements that will facilitate review and confirmation of financial information. This includes guidelines for reporting financial data.

Recommendation 11

In order to improve the usefulness of the serious occurrence reporting process, the Ministry of Community and Social Services should:

- *ensure that serious occurrence reports are entered into its data system on a timely basis;*
  Status: Fully Implemented.

Details

Following the last two fiscal years, the Ministry has required regional office directors to attest in writing that all serious occurrence reports submitted up to the fiscal year-end have been uploaded, closed and signed off in the Serious Occurrence System. Regional office directors are also required to describe the process they have in place to keep the Serious Occurrence System up to date.

For the purpose of our follow-up, regional directors attested that all serious occurrence reports had been uploaded into the system as of June 30, 2016.

- *refine the categories and promote consistent reporting;*
  Status: In the process of being implemented by December 2016.

Details

At the time of our audit in 2014, some of the serious occurrence categories were too broad and not detailed enough to analyze and identify trends for specific issues and any corrective action needed.

To address this, the Ministry established a Serious Occurrence Improvement Project team to refine and enhance the categories, levels, timelines and reporting process for serious occurrences, as well as to identify the IT requirements for developing a new database.

At the time of our follow-up, the categories had been revised and approved, but not yet shared with service providers. The revised categories included death, restrictive intervention, serious injury/illness, allegations of abuse, neglect or exploitation, administrative error, serious complaints, client/individual actions (e.g., suicidal behaviour, contraband), and service disruption/emergency situation. The Ministry expected to communicate the revised categories and descriptions to service providers by December 2016.

To help ensure consistency in reporting in the interim, in July 2016, the Ministry updated the Q & A document attached to the existing 2013 Serious Occurrence Reporting Guidelines to clarify for service providers the reporting of serious occurrences.

- *reconcile annual serious occurrence summary reports from service providers with occurrences reported throughout the year to ensure completeness; and*
  Status: In the process of being implemented by March 2017.

Details

The Ministry, along with the Ministry of Children and Youth Services, has established a Serious Occurrence Improvement Project team, whose work includes the integration of information that will enable the Ministry to reconcile annual serious occurrence reports from service providers. Specifically, to enable this, the Ministry is developing an automated IT solution that will provide notification and reporting capabilities to both service providers and the Ministry, including the ability to review and manage serious occurrence summary reports.

The Ministry expects that a process for data reconciliation will be developed and implemented by March 2017. In the interim, in April 2016, the Ministry sent a memo to all regional directors that included a reminder to reconcile serious occurrence reports throughout the year with service providers' records.

- *analyze serious occurrences to identify anomalies and systemic issues, and to inform decision-making.*
  Status: In the process of being implemented by March 2017.

Details

In October 2015, the Ministry produced a five-year summary report of serious occurrences, which identified the number and type of serious occurrences reported, agencies that were not reporting at all, and submission of incomplete and late reports. Based on this analysis, the Ministry reported the following to its senior management:

- Despite decreases in the total number of logged serious occurrences, there were decreases in those that were on-time and complete. Provincially, the use of physical restraints and complaints made by or about a client were consistently the top two types of serious occurrences.
- Provincial and regional trends indicated that a backlog still existed in logging serious occurrences into the Ministry's IT system. In each of the last five fiscal years, approximately 40% of Ministry-funded agencies did not have a serious occurrence logged. For the last five fiscal years combined, 19% of the agencies that received Ministry funding did not have a logged serious occurrence.
- Serious occurrences were entered into the system without linking them to a program, making analysis of serious occurrences by program and type of residential setting impossible.

At the time of our follow-up, the Ministry had not yet identified issues, anomalies and trends at the system, regional and agency levels. It expected to conduct such an analysis for the current fiscal year by March 2017, and thereafter annually. The Ministry said that once this analysis was completed, it would drive investigations and corrective measures.

Chapter 1
Section
1.11

Ministry of Energy

Smart Metering Initiative

Follow-Up on VFM Section 3.11, *2014 Annual Report*

RECOMMENDATION STATUS OVERVIEW

	# of Actions Recommended	Status of Actions Recommended				
		Fully Implemented	In Process of Being Implemented	Little or No Progress	Will Not Be Implemented	No Longer Applicable
Recommendation 1	4	1	1	1	1	
Recommendation 2	3		2		1	
Recommendation 3	3		3			
Recommendation 4	1	1				
Recommendation 5	1				1	
Recommendation 6	1					1*
Recommendation 7	1			1		
Recommendation 8	1			1		
Recommendation 9	2	1	1			
Recommendation 10	1	1				
Recommendation 11	1		1			
Total	**19**	**4**	**8**	**3**	**3**	**1**
%	**100**	**21**	**42**	**16**	**16**	**5**

* Hydro One (now Hydro One Inc.) ceased to be an agency of the Crown following passage of the *Building Ontario Up Act, 2015* on June 4, 2015. As a result, our Office no longer has the authority to do audit or follow-up work on Hydro One Inc.

Background

The Ontario government's Smart Metering Initiative (Smart Metering) is a large and complex project that required the involvement of the Ministry of Energy (Ministry), the Ontario Energy Board (OEB), the Independent Electricity System Operator (IESO), and over 70 distribution companies, including Hydro One. In 2004, the government announced plans to reduce energy consumption in the province by creating a culture of conservation. One aspect of this plan was the installation of smart meters in homes and small businesses across Ontario. As of June 2016, approximately 4.8 million smart meters (unchanged since May 2014) had been installed in homes and at small businesses across Ontario.

Smart meters, like conventional meters, track the quantity of electricity used. However, the smart

meters also log use by time of day. This feature allows for the introduction of time-of-use (TOU) pricing, which is intended to encourage ratepayers to shift electricity usage to times of off-peak demand, when rates are lower. Under TOU pricing, electricity rates are highest during the day, but drop at night, on weekends and on holidays. The combination of smart meters and TOU pricing was expected to encourage electricity conservation and reduce demand during peak times by encouraging ratepayers to, for example, run the dishwasher or clothes dryer at night rather than in the afternoon, and set the air conditioner's thermostat a few degrees warmer on summer afternoons. The reduction of peak demand could reduce the need to build new power plants, expand existing ones or enter into additional power purchase arrangements.

In our *2014 Annual Report*, we found that Smart Metering was rolled out by the Ministry with aggressive targets and tight timelines, without sufficient planning and monitoring by the Ministry, which had the ultimate responsibility to ensure that effective governance and project-management structures were in place to oversee planning and implementation. Many of the anticipated benefits of Smart Metering had not been achieved and its implementation had been much more costly than projected.

Our other significant concerns included the following:

- The Ministry did not complete any cost-benefit analysis or business case prior to making the decision to mandate the installation of smart meters. In contrast, other jurisdictions, including British Columbia, Germany, Britain and Australia, all assessed the cost-effectiveness and feasibility of their smart-metering programs before proceeding.
- After the government announced the rollout of Smart Metering in April 2004, the Ministry prepared a cost-benefit analysis and submitted it to Cabinet. However, the analysis was flawed; its projected net benefits of approximately $600 million over 15 years were significantly overstated by at least $512 million.
- The Ministry had neither updated the projected costs and benefits of Smart Metering, nor tracked its actual costs and benefits, to determine the actual net benefits realized. As the project progressed, there were many challenges with its development and implementation. As of May 2014, our analysis showed that overall smart meter-related implementation costs had reached almost $2 billion (compared to the initial projected cost of $1 billion), with additional costs to come. The majority of these costs were passed on to the ratepayers in Ontario.
- The purpose of Smart Metering was to enable TOU pricing, which was expected to reduce electricity demand during peak periods. The Ministry set several targets to reduce peak electricity demand, but these targets had not been met.
- Ratepayers pay different amounts for the same power usage depending on where they live in Ontario, mainly due to different delivery costs of over 70 distribution companies. For example, at the time of our 2014 audit, a typical residential electricity bill could vary anywhere between $108 and $196 a month, mainly because of the variation in delivery costs ranging from $25 to $111 a month charged by different distribution companies.
- The difference between the On-Peak and Off-Peak rates had not been significant enough to encourage a change in consumption patterns. When TOU rates were introduced in 2006, the On-Peak rate was three times higher than Off-Peak; by the time of our 2014 audit, that differential had fallen to 1.8 times.
- The significant impact of the Global Adjustment on TOU rates was not transparent to ratepayers. Between 2006 and 2015, the 10-year accumulative actual and projected Global Adjustment totalled about $50 billion which was equivalent to almost five times the

2014 provincial deficit of $10.5 billion. The Global Adjustment represented an additional payment covered by ratepayers over the market price of electricity and it accounted for about 70% of each of the three TOU rates.

- Under Smart Metering, a $249-million provincial data centre was established to collect, analyze and store electricity consumption data. However, most distribution companies used their own systems to process smart-meter data. The costs of this duplication—one system at the provincial level and another locally—were passed on to ratepayers.
- Additionally, we noted that many of Hydro One's billing complaints related to the increases in the TOU rates, connectivity issues between smart meters and associated communication systems, bills based on errors arising from smart meters connected to incorrect addresses, and other Hydro One billing system issues.

In our report, we directed recommendations to the Ministry, the IESO, Hydro One and the OEB. We recommended that business cases be prepared before proceeding with any major projects in the future; that the structure and pricing of the TOU program be re-evaluated; that Hydro One improve its systems for dealing with ratepayer complaints about billing and metering issues; that the impact of the Global Adjustment on electricity bills be transparent to ratepayers; and that the limitations and options surrounding the provincial data centre be reassessed.

We made a number of recommendations for improvement and received commitments from the Ministry, the IESO, Hydro One and the OEB that they would take action to address our recommendations.

Standing Committee on Public Accounts

In May 2015, the Standing Committee on Public Accounts (Committee) held a public hearing on our 2014 Smart Metering Initiative audit. In November 2015, the Committee tabled a report in the Legislature resulting from this hearing. The Committee endorsed our findings and recommendations. The Committee made eight additional recommendations and asked the Ministry, the IESO, and the OEB to report back by the end of March 2016. The Committee's recommendations and follow-up on their recommendations are found in **Chapter 3**.

Status of Actions Taken on Recommendations

The Ministry, the OEB and the IESO provided us with information in spring and summer of 2016 on the current status of the recommendations we had made in our *2014 Annual Report*. According to the information we received, only about 20% of our recommendations had been fully implemented, specifically in the areas of conducting a cost-benefit analysis prior to implementing major initiatives in the electricity sector; educating the distribution companies about the proper business processes to follow when submitting consumption data to the provincial data centre; and improving security controls when accessing smart-meter data. The Ministry was in the process of implementing about 40% of our recommendations, mainly in the areas of considering different scenarios or alternatives as part of the long-term energy process; ensuring ratepayer concerns are addressed properly and in a timely manner, and that clear, timely and accurate bills are issued to ratepayers; and proposing changes to legislation that would require utilities to report smart meter-related fire incidents. However, the Ministry has shown little or no progress in 16% of our recommendations, specifically in areas such as reducing the duplication of smart-meter processing costs, and ensuring that Ontario's electricity supply and demand forecasts are critically re-evaluated periodically. Three recommendations

will not be implemented and one recommendation addressed to Hydro One is no longer applicable. Hydro One did not participate in our follow-up work. Hydro One Inc., formerly called Hydro One, and its subsidiaries are no longer agencies of the Crown under the *Building Ontario Up Act, 2015*, and so, are not required to respond to our recommendations. We were therefore unable to assess the status on our recommendation regarding its contracting and procurement activities.

The status of each of our recommendations is summarized below.

Governance and Oversight of Planning and Implementation

Recommendation 1

To ensure that any future major initiative in the electricity sector is implemented cost-effectively and achieves its intended purposes, the Ministry of Energy should:

- *conduct a cost-benefit analysis or business case prior to implementing an initiative to assess costs, benefits and risks;*
  Status: Fully implemented.

Details

In our 2014 audit, we found that the Ministry did not complete any cost-benefit analyses or business-case studies before making the decision to install smart meters across Ontario. The lack of a proper cost-benefit analysis exposed the province to unanticipated risks and unknown cost.

During our follow-up, we found that the Ministry has since performed business-case studies prior to undertaking recent projects related to smart-metering initiatives.

In late 2014, the Ministry worked with the IESO and the Advanced Energy Centre to prepare a business case for a new data project that combines time-of-use (TOU) consumption data with other data relating to, for example, weather, location and property information, and consumers' participation in conservation. The purpose of this project is to develop a combined data set that the Ministry can use to analyze electricity usage and make informed decisions on energy policy, infrastructure planning and conservation programs. The Ministry, IESO and Advanced Energy Centre consulted with 18 local distribution companies to assess the costs, benefits and implementation considerations of the project, including ways to ensure the privacy and security of customer information. The business case determined that the potential benefits will outweigh the potential costs. The Ministry is currently reviewing and assessing the business case to determine further action.

In fall 2014, the Ministry commissioned a study to evaluate the current state of the smart grid in Ontario. Smart grid is an intelligent electricity infrastructure that uses advanced communications and control technology to improve the flexibility, reliability and efficiency of the electricity system (smart metering represents the first step toward creating a smart grid). To maximize benefits and minimize risks to Ontario, the study evaluated three different smart grid deployment scenarios for the future. It also identified potential barriers to achieving the full value of the estimated benefits. This report will inform the Ministry's future policy considerations with regard to the development and adoption of the smart grid.

- *review the role of the Ontario Energy Board as an independent regulator when ministerial directives that impact electricity rates are issued;*
  Status: Will not be implemented. The Office of the Auditor General continues to believe that the role of the OEB as an "independent" regulator should be reviewed.

Details

After the government announced Smart Metering in April 2004, the Minister of Energy issued a directive to the OEB requiring it to develop an implementation plan to achieve the government's smart-meter targets. Our 2014 audit noted that

the Ministry had set aside the regulatory role of the OEB. Instead of conducting a cost-benefit analysis and submitting the analysis to the OEB for independent review and objective evaluation, the Ministry directed the OEB to develop the implementation plan and project the costs associated with implementation.

The *Energy Statute Law Amendment Act, 2016*, proclaimed into force on July 1, 2016, changed the electricity planning process in Ontario. Under the new legislation, the Ministry is responsible for developing and updating Long-Term Energy Plans for Ontario while the OEB is responsible for preparing an implementation plan when the Ministry requests it. In other words, the Ministry will not implement this recommendation because the new long-term energy planning process does not enable OEB to review and approve the Ministry's plans as an independent regulator.

- *consider different scenarios or alternatives as part of the planning process to assess possible risks and uncertainties; and*

  Status: In the process of being implemented by mid-2017.

Details

In our 2014 audit, we found that many other jurisdictions, including British Columbia, Germany, Great Britain and Australia, all assessed the cost-effectiveness and feasibility of smart-meter programs before implementing them. Compared to these other jurisdictions, the implementation of smart metering in Ontario was without a proper cost-benefit analysis, including an assessment of the risks and costs associated with the project.

During our follow-up, we found that the Ministry has considered different scenarios, possible risks and uncertainties in the development of the smart grid. In fall 2014, the Ministry commissioned a study that identified and evaluated three different deployment scenarios and their potential barriers. This study will help the Ministry make decisions on the policy framework and tools needed to best support the development of the smart grid, and to maximize benefits and minimize risk for Ontario.

With respect to planning for the energy sector, the *Energy Statute Law Amendment Act, 2016* requires the IESO to submit a technical report to the Ministry containing information on the adequacy and reliability of electricity resources with respect to anticipated electricity supply, capacity, storage, reliability and demand. The Ministry is required to develop the Long-term Energy Plan after thorough consideration of the technical report, different scenarios, and risks and feedback from public consultations. Subsequent to the new legislation that came into effect the Ministry has begun the development of the next Long-Term Energy Plan, which is to be finalized and released in mid-2017.

- *re-evaluate and update the implementation plan periodically to identify and respond to changing conditions and unforeseen events in the electricity market.*

  Status: Little or no progress.

Details

Our 2014 audit found that Smart Metering was implemented without sufficient periodic re-evaluation of Ontario's electricity supply and demand positions throughout the implementation period. As a result, the province maintained the aggressive implementation timelines and approved significant new increases in power generation capacity even though the demand for electricity fell in 2016.

The new *Energy Statute Law Amendment Act, 2016* also requires the Ministry to periodically issue a Long-Term Energy Plan that sets out the government's goals and objectives for the energy sector, including adapting to changing market, technology and economic conditions. The Ministry is required to consult with consumers, distribution companies, generators, transmitters, and other stakeholders in the energy sector in developing the Long-Term Energy Plan. However, since the new legislation came into effect, the Ministry has not re-evaluated the Long-Term Energy Plan.

Billing Impacts on Electricity Charge to Ratepayers

Recommendation 2

To ensure that the combination of smart meters and time-of-use (TOU) pricing is effective in changing ratepayer electricity-usage patterns to reduce peak electricity demand and related infrastructure costs, and that ratepayers understand the impacts of TOU pricing on their electricity bills, the Ministry of Energy should work with the Ontario Energy Board and/or the distribution companies to:

- *evaluate TOU pricing design, including TOU rates, TOU periods and the allocation of the Global Adjustment across the three TOU rates;*
  Status: In the process of being implemented by April 2021.

Details

Our 2014 audit found that the difference between the On-Peak and Off-Peak electricity rates was not significant enough as an incentive for ratepayers to reduce peak electricity demand. We also found that the distribution of TOU periods did not fully reflect actual patterns of electricity use. Because of the substantial growth of the Global Adjustment (an extra charge mainly to cover the gap between the guaranteed prices paid to contracted power generators and the electricity market price), the On-Peak-to-Off-Peak ratio dropped from three-to-one in 2006 to 1.8-to-one in 2014, meaning that On-Peak power cost 1.8 times as much as Off-Peak at the time of our last audit.

Subsequent to our audit, on November 16, 2015, the OEB completed an extensive review of the TOU pricing design and increased the ratio between On-Peak and Off-Peak to a minimum of 2:1. The OEB has also released a report that set out a multi-year plan that will redesign the electricity pricing structure. The five actions included in the multi-year plan are as follows:

1. update the pricing plan's objectives, including a greater focus on peak demand reduction;
2. improve consumers' understanding of the TOU program and how to effectively respond to TOU pricing;
3. conduct pricing pilots to determine an optimal pricing structure;
4. engage low-volume business consumers to discuss TOU concerns; and
5. work with the government to reduce regulatory barriers that limit OEB's ability to change the TOU periods and the allocation of Global Adjustment.

The OEB has already incorporated new objectives into its pricing plan (action 1). It was in the process of implementing the remaining four actions. For example, the OEB has retained a consultant to assist with the redesign of its consumer website (to be completed by early 2017), to help consumers better respond to TOU pricing and manage their energy consumption (action 2). The OEB also engaged an expert to help set up pricing pilots to assess options for new TOU designs (action 3). And, in an effort to widen the difference between On-Peak and Off-Peak rates, the OEB changed the way the Global Adjustment is allocated across the three TOU rates (action 5). As a result, the On-Peak rate was more than two times higher than Off-Peak rate at the time of our follow-up.

Throughout 2017 and 2018, the OEB will be implementing pilots to assess the different pricing and non-pricing mechanisms. The OEB estimated that it will take about three to five years to fully implement the redesign of the electricity pricing structure.

- *monitor trends in ratepayer electricity consumption to evaluate the effectiveness of TOU pricing over time; and*
  Status: In the process of being implemented by December 2018.

Details

The distribution companies that we consulted during our 2014 audit said they did not conduct studies to examine the changes in consumption after the

implementation of TOU pricing. Studies commissioned by the Ontario Power Authority (now the IESO) and the OEB concluded that TOU pricing had only a modest impact on reducing peak demand among residential ratepayers, a limited or unclear effect on small businesses, and no impact at all on energy conservation.

Subsequent to our audit, the IESO and OEB conducted three studies since 2014 to monitor trends in ratepayer electricity consumption and evaluate the effectiveness of TOU pricing over time.

In February 2016, the IESO published the results of a study indicating that residential customers showed clear patterns of shifting their electricity consumption from high- to low-peak periods, but little evidence of conservation. The magnitude of consumption-shifting, however, also appeared to diminish from 2012 to 2014, as people either shifted less of their usage to low-peak times, or they slowly reverted back to high-peak usage. Small businesses showed only marginal consumption-shifting behaviours and were less responsive to the TOU prices than residential customers.

The OEB commissioned a consumer researcher to gather evidence on consumer awareness about TOU. Key findings from the consumer research, completed in January 2015, were as follows:

- consumers have a moderate level of awareness of the TOU program;
- residential and business consumers displayed confusion and a lack of understanding about the electricity system in Ontario;
- many consumers do not understand the charges on their electricity bills;
- beyond knowing the names of the TOU periods, consumer awareness of the system falls off drastically; and
- even consumers who are aware of TOU pricing may still not understand when and how it works or what they need to do to reduce their electricity bills.

The OEB also commissioned another review to assess how consumers are responding to the current pricing structure in Ontario. The December 2014 review showed the following:

- the perceived or actual monthly savings from shifting energy consumption away from high-peak times may not be enough to encourage consumers to permanently change their household routines in a meaningful way;
- the behaviours required to shift from high- to low-peak hours are perceived as being too complex and time-consuming;
- automatic or routine behaviours are hard to change; even those who understand TOU pricing and intend to shift their consumption behaviours may not end up doing so because of scheduling hassles.

The OEB indicated to us that consumers' response to the TOU program can be improved by better educating them about TOU pricing. As such, the OEB has made consumer education one of its priorities. It is currently working with a newly established Consumer Panel to assess what information consumers need to understand the system. The OEB is also in the process of implementing pilot projects that focus on building consumer awareness.

- *disclose the components of the TOU rates (electricity market price and Global Adjustment) separately on electricity bills so that the impact of the Global Adjustment is transparent to ratepayers.*

  Status: Will not be implemented. The Office of the Auditor General continues to believe that this is a viable practice to increase both the awareness and transparency of the impact of the Global Adjustment to ratepayers.

Details

In our 2014 audit, we found that the impact of Global Adjustment on TOU rates was not transparent to ratepayers because it was embedded in the TOU rates on the electricity bills. We noted that the Global Adjustment charged to ratepayers had

increased significantly since 2006 and accounted for about 70% of each TOU rate in 2013.

The OEB has considered our recommendation, but decided not to implement it. The Global Adjustment is a component of the cost of electricity and is incorporated into the setting of TOU prices. OEB does not believe a breakdown of TOU prices would clarify pricing for consumers but likely to create more confusion. It does not think that showing the Global Adjustment as a separate line item will help consumers make decisions about electricity consumption and how to manage their electricity costs. Instead, it believes consumers are focused on their TOU usage when making decisions about how to reduce their electricity costs. Instead of showing the Global Adjustment as a separate line item on the electricity bill, the IESO publicly reports the Global Adjustment breakdown by business and consumer categories. It also indicated that it will conduct pilots to assess other changes to make the electricity bills easier to understand, including the following:

- renaming the TOU time periods;
- redesigning the visual presentation of TOU time periods;
- modifying the presentation of the electricity bill; and
- providing better information on different household appliances, such as the amount of electricity the appliance consumes, the cost of that electricity, and how use and costs can be managed under TOU pricing.

However, the OEB has limited ability to mandate changes to the electricity bills of low-volume consumers because they are governed by Ontario regulations. The OEB noted in its response that consumers have access to information regarding the cost of the Global Adjustment through IESO's publicly available market price website. The OEB's Regulated Price Plan Reports also provide details on estimates of the Global Adjustment costs and how those costs are allocated to the three TOU periods.

Our position is that these changes will not address our recommendation to increase awareness of Global Adjustment among ratepayers and transparency of its impact on them.

Recommendation 3

To ensure that ratepayer concerns are addressed properly and in a timely manner, and that clear, timely and accurate bills are issued to ratepayers, the Ministry of Energy should work with the Ontario Energy Board, Hydro One and other distribution companies to:

- *improve tracking of the nature and details of ratepayer enquiries and complaints to identify and monitor common or recurring concerns;*
  Status: In the process of being implemented by December 2016.

Details

Our 2014 audit found that many distribution companies we consulted did not track enquiries and complaints separately, nor did they log the nature or type of complaints. As a result, they were unable to quantify the volume of complaints relating to Smart Metering before and after its implementation, and could not separate concerns about smart meters from those about billing.

At the time of our follow-up, the OEB had implemented processes for tracking and monitoring the concerns it received from energy consumers as part of its responsibility for protecting the interest of consumers. With respect to customer complaints to distribution companies, the OEB is going to require distribution companies to address consumer complaints within 10 business days and to maintain records of complaints. Once the new process becomes mandatory, distribution companies are required to report to the OEB on service quality metrics related to complaints and customer communications. This information will allow the OEB to assess the distributor companies' complaint handling practices and to identify trends in complaints that require further investigation.

- *better educate ratepayers about the impacts of time-of-use (TOU) pricing and other factors*

on electricity bills, as well as the root causes of potential metering or billing issues and what is being done to address them; and

Status: In process of being implemented by December 2018.

Details

Our 2014 audit found that ratepayers usually raised questions and concerns about Smart Metering by contacting the OEB and the distribution companies. Between 2008 and 2014, about two-thirds of customer enquiries and complaints received by the OEB questioned the TOU pricing structure and whether it would save them money. Those distribution companies that tracked the nature of complaints also reported that a majority of the concerns raised by ratepayers was related to TOU pricing.

As previously mentioned under Recommendation 2 (bullet 2), the OEB commissioned two consumer research studies that suggested consumers are still unsure about how TOU pricing works. The OEB indicated that by December 2018, it will implement the following actions:

- improve the electricity bill to clarify TOU pricing for consumers, such as modifying the presentation of the electricity bill and including better information on how the cost of operating household appliances can be managed; and
- redesign its consumer website to improve the delivery of useful information and tools to help consumers take full advantage of TOU pricing and manage their energy consumption and costs.

- *identify and fix any problems with their billing systems and local communication systems on a timely basis, and monitor the performance of those systems over time to reduce ratepayer complaints triggered by these problems.*

Status: In process of being implemented by December 2016.

Details

At the time of our 2014 audit, Hydro One (now Hydro One Inc.), Ontario's largest distribution company, was adapting to and working on some technical issues with its new billing system. This resulted in complaints about erroneous bills, prolonged estimated bills, delayed bills and other billing errors. In addition, some ratepayers did not receive any bills or received only estimated bills for extended periods because actual consumption data was not available given connectivity issues between the smart meters and associated local communication systems.

Subsequent to our audit, the OEB required Hydro One to develop plans and take corrective actions to fix the technical issues affecting its customer billing system and the smart-meter network. The OEB informed us that Hydro One fixed its billing problems and returned to normal collection operations in mid-2015.

To minimize billing errors in the future, the OEB also implemented the following new billing rules that require all distribution companies to:

- issue bills based on actual meter readings instead of estimates;
- stop disconnecting customers for an unpaid bill where all of the consumption was estimated;
- achieve a 98% billing accuracy score based on a new OEB performance measure calculation; and
- implement monthly billing instead of bi-monthly billing to their customers by no later than December 31, 2016.

Billing Impacts of Delivery Charge on Ratepayers

Recommendation 4

To ensure that the unanticipated costs incurred by distribution companies in implementing the Smart Metering Initiative are justified, and that any significant cost variations among distribution companies are adequately explained, the Ontario Energy Board

should perform detailed reviews of distribution-company costs, including an analysis of cost variations for similar services among different distribution companies.

Status: Fully implemented.

Details

Our 2014 audit found that each distribution company negotiated with different vendors to procure systems for their regions. This resulted in significant differences in the costs incurred by distribution companies. Such wide variation was mainly due to geographical issues in service areas and the degree of upfront expenses, such as project-management and system-integration costs.

Since our last audit, the OEB has completed detailed reviews of all distribution company costs, including an analysis of cost variations for similar services among different distribution companies. Although the analysis found variations in smart meter costs among the distribution companies, the OEB's adjudication process found these cost variations to be reasonable and approved them.

Recommendation 5

To improve cost-efficiency of the distribution companies and reduce variations in distribution companies' costs, the Ministry of Energy, in conjunction with the Ontario Energy Board, should formally conduct a cost-benefit analysis into consolidating distribution companies as recommended by the Ontario Distribution Sector Review Panel.

Status: Will not be implemented. The Office of the Auditor General continues to believe that the Ministry should formally conduct a cost-benefit analysis into consolidating distribution companies to improve cost-efficiency of, and to reduce cost variations in, distribution companies.

Details

Our 2014 audit found that ratepayers pay significantly different amounts for the same power usage depending on where they live in Ontario and which distribution company provides the service. The Ontario Distribution Sector Review Panel, established by the Minister of Energy, made a recommendation to merge the existing distribution companies into eight to 12 larger ones. The mergers were expected to help reduce sector-wide operating costs by 20% in areas such as customer service, billing, facilities maintenance and administration.

During our follow-up, the Ministry advised us that although the government will not legislate or force consolidation within the distribution sector, it has created incentives for voluntary consolidation. In June 2015, the Ontario government announced a time-limited relief on taxes pertaining to transfers of electricity assets, such as transactions involving the merger or acquisition of distribution companies. Between January 1, 2016, and December 31, 2018, the provincial transfer tax rate of local distribution companies will be reduced from 33% to 22%, and distribution companies with fewer than 30,000 customers will be completely exempt from paying transfer taxes.

Recommendation 6

To ensure that any future project is implemented cost-effectively and in compliance with sound business practices, Hydro One should review and improve its contracting and procurement activities, such as retaining adequate documentation to justify vendor selection and evaluation and acquiring enough knowledge about a project's business requirements before issuing a Request for Proposal, to minimize the risks of significant contract-cost increases.

Status: No longer applicable. Hydro One (now Hydro One Inc.) ceased to be an agency of the Crown following passage of the *Building Ontario Up Act, 2015* on June 4, 2015. As a result, our Office no longer has the authority to do audit or follow-up work on Hydro One Inc.

Details

Our 2014 audit noted that the smart-meter project management and system-integration costs incurred by Hydro One were significantly high compared to other distribution companies. We identified areas where Hydro One could improve its contracting and procurement practices.

In February 2016, our Office formally requested Hydro One Inc. (previously Hydro One) to report back on the status of its actions taken to address our recommendation. In response to our request, Hydro One Inc. notified our Office that it will not participate in our follow-up work. Since the government passed the *Building Ontario Up Act, 2015*, under which Hydro One Inc. and its subsidiaries are not agencies of the Crown, Hydro One Inc. is not required to participate in this follow-up. Without receiving any status updates from Hydro One Inc., our Office was not able to assess and report on the status of this recommendation.

Smart-Meter Data Processing Systems and Costs

Recommendation 7

To ensure that ratepayers are not burdened with the duplicated and ongoing costs of system development and integration, the Ministry of Energy should work with the Independent Electricity System Operator (IESO), the Ontario Energy Board (OEB) and the distribution companies to re-evaluate options around operating the provincial data centre and/or having separate local systems at individual distribution companies in order to determine the cost-effectiveness of various options and avoid continued duplication of systems and costs.

Status: Little or no progress.

Details

The government designated the IESO as a Smart Metering Entity with an exclusive authority to operate a provincial data centre to collect, analyze and store smart-meter data; and to calculate electricity usage so that distribution companies can bill their customers using TOU pricing. However, our 2014 audit found that most distribution companies were using their own systems to process smart-meter data, resulting in duplication of systems and costs.

At the time of our follow-up, we found that the Ministry has made little progress in reducing the duplication of smart-meter processing costs. The Ministry did not re-evaluate options around operating the provincial data centre and/or having separate local systems at individual distribution companies in order to determine their cost-effectiveness and avoid continued duplication of systems and costs. The Ministry indicated that if local distribution companies are duplicating the functionalities of the provincial data centre, they are acting contrary to government regulation.

We noted the same issue we raised in 2014 where a large distribution company, with about 700,000 smart-meter customers, was not transmitting any data to the provincial data centre although their customers were charged the 79¢-a-month fee. Although this company has obtained approval from the OEB to fully integrate with the provincial data centre and has agreed to start using the provincial data centre to process TOU bills by September 2017, we found that ratepayers of this distribution company have continually paid for the monthly charge, totalling about $20.9 million as of mid-2016 (up from $7.7 million at the time of our 2014 audit), for a data centre the company has yet to start using.

The OEB issued an order in 2016 requiring IESO to implement more robust data gathering from smart meters and distribution companies. The IESO, in consultation with the Office of the Information and Privacy Commissioner of Ontario, is to develop an implementation plan to allow third-party access to depersonalized smart-meter data. This third-party access is intended to enable more detailed analysis of consumption across the province, with the resulting information used to support rate design, regional electricity planning and conservation initiatives.

Recommendation 8

To ensure that any future province-wide project involving the complex electricity distribution sector is implemented cost-effectively, the Ministry of Energy should work with the relevant electricity sector organizations to set appropriate and reasonable implementation targets and timelines in order to

minimize the costs and risks associated with system development and integration for numerous distribution companies.

Status: Little or no progress.

Details

In 2014, we found that the Ministry set tight and aggressive timelines for implementing TOU pricing. In particular, 40 out of 73 distribution companies applied for extensions to their mandated implementation dates because of operational or technical problems, including delays in integrating with the provincial data centre and data-quality issues with certain smart meters.

The Ministry acknowledged the importance of planning and consulting with various stakeholders before implementing any major initiatives in the future. The new energy planning process requires the Ministry to consult with various stakeholders in developing the next Long-Term Energy Plan, which is expected to be released by the Ministry in mid-2017. Although the IESO and OEB will develop and submit implementation plans to the Ministry for review, it is unknown at the time of this follow-up whether or not the specific targets and timelines are appropriate and reasonable.

Smart-Meter Data Accuracy and Quality

Recommendation 9

To ensure the accuracy, quality and usefulness of smart-meter data, the Independent Electricity System Operator should:

- *work with the distribution companies to review the limitations and the billing problems associated with the provincial data centre and the distribution companies' business processes, including improving the procedures of processing smart-meter data during meter replacements and power blackouts, as well as enhancing the data retrieval and querying capability of the provincial data centre; and*

  Status: In the process of being implemented by December 2016.

  Details

  At the time of our 2014 audit, we found several shortcomings in the way the provincial data centre processed smart-meter data (such as limited capabilities for data retrieval and querying), as well as in the business processes of the distribution companies. These limitations had affected the quality and usefulness of smart-meter data.

  Subsequent to our audit, the IESO added a new feature to the provincial data centre whereby distribution companies can view summarized statistics on key smart-meter data in real time. This allows the distribution companies to identify issues and correct them as needed. The IESO had provided training for distribution companies on how to use this new feature and to generate correct billings during meter replacements and power blackouts in order to minimize billing errors.

  The IESO has also developed and is implementing (by end of 2016) an enhanced data retrieval capability to support the increasing volume and variety of ad-hoc query and data extract requests at the provincial data centre. When the enhanced capability is fully implemented, distribution companies should be able to retrieve larger volumes of data for longer periods and further back in time. In addition, distribution companies should be able to extract data much more quickly than before.

- *educate the distribution companies about the proper business processes that have to be followed.*

  Status: Fully implemented.

  Details

  In 2014, we reported that some distribution companies did not follow the required business processes to submit time-of-use data to the provincial data centre, compromising the quality and completeness of the data submitted.

  Subsequent to our audit, the IESO provided classroom training to distribution companies on the

business processes they should follow when submitting consumption data to the provincial data centre in order to minimize billing errors. To complement these training sessions, the IESO also developed a repository of interactive, web-based training materials that distribution companies can access at their convenience. At the time of our follow-up, 19 courses had been created and accessed more than 200 times by more than 60 unique users from distribution companies.

Smart-Meter Security and Safety Risks

Recommendation 10

To ensure that smart-meter data is processed and stored securely, the Independent Electricity System Operator should work with the distribution companies to improve their system and data-security controls in order to prevent and detect unauthorized access to smart-meter data.

Status: Fully implemented.

Details

Our 2014 audit found that improvements could be made to smart-meter data security at the provincial data centre and at the distribution-company level. Smart-meter data could reveal information about customers' daily routines and changes in those routines. As a result, electricity-use patterns could be mined, for example, for marketing and advertising purposes.

Subsequent to our last audit, the IESO and the Information and Privacy Commissioner of Ontario jointly developed a privacy and security framework for the provincial data centre. This framework includes steps to ensure that only local distribution company users and their authorized third-party vendors are able to retrieve smart-meter information.

In November 2015, the IESO received its sixth consecutive annual clean audit by an independent external audit firm that examined the Meter Data Management and Repository's operations, processes and procedures. The audit confirmed that appropriate controls are in place at the IESO. It also described the controls that should be in operation at local distribution companies to prevent and detect unauthorized access to smart-meter data.

The IESO also recently introduced the following measures to help local distribution companies manage their users' access to the provincial data centre:

- distribution companies must respond to a security question they have previously created when requesting the IESO grant a new user access to the provincial data centre;
- distribution companies must review their users' accounts annually and notify the IESO of any changes required in a timely manner; and
- two webinar sessions were recorded to educate local distribution companies about their responsibilities for establishing security controls within their own organizations to complement those in place at the IESO. The webinars are available at any time to local distribution companies through the Smart Metering Entity's secure on-line information centre.

Recommendation 11

To ensure that potential fire risks of smart meters are addressed appropriately and in a timely manner, the Ministry of Energy should work with relevant entities, such as the distribution companies, the Office of the Fire Marshal and the Electrical Safety Authority, to track and monitor information on smart meter-related fire incidents so as to identify and understand their causes in Ontario.

Status: In the process of being implemented by December 2016.

Details

In our 2014 audit, we found instances of Ontario ratepayers reporting fires arising from smart meters. However, no accurate or complete information on smart meter-related fires was available in Ontario. Insufficient tracking and monitoring of

smart meter-related fire incidents made it difficult to determine the scope and extent of the problem across the province, creating safety risks in Ontario.

During our audit field work in 2014, the Electricity Safety Authority (ESA), the agency responsible for enhancing public electrical safety in Ontario, started reviewing smart meter-related fire incidents in Saskatchewan to determine if there could be any concern for Ontario. Subsequently, the ESA ordered the distribution companies to remove a specific type of meter because of the potential fire risk. Approximately 5,110 smart meters have since been removed. In July 2015, the ESA issued its final review report, which concluded that there was no systemic safety risk with any other meter model or design currently used in Ontario. The report also included a recommendation for mandatory reporting of electrical safety incidents involving utility assets, which is currently done by distribution companies on a voluntary basis. The ESA is currently consulting the public on the proposed changes to legislation that would require utilities to report smart-meter incidents, and their final recommendations are expected to be considered or implemented by December 2016.

Chapter 1
Section
1.12

Ministry of the Environment and Climate Change

Source Water Protection

Follow-Up on VFM Section 3.12, *2014 Annual Report*

RECOMMENDATION STATUS OVERVIEW

	# of Actions Recommended	Status of Actions Recommended			
		Fully Implemented	In Process of Being Implemented	Little or No Progress	Will Not Be Implemented
Recommendation 1	3	2	1		
Recommendation 2	1		1		
Recommendation 3	1		1		
Recommendation 4	1		1		
Recommendation 5	3		2	1	
Recommendation 6	1	1			
Recommendation 7	1	1			
Recommendation 8	1			1	
Recommendation 9	3	2	1		
Recommendation 10	2	1		1	
Total	**17**	**7**	**7**	**3**	**0**
%	**100**	**41**	**41**	**18**	**0**

Background

Ontario borders four of the five Great Lakes, which provide drinking water to over 75% of the province's population. Of the remainder, 1.6 million people depend on private wells that draw water from underground aquifers, while the rest get their drinking water from more than 250,000 inland lakes and 500,000 kilometres of rivers and streams.

In May 2000, seven people died and more than 2,300 became ill in the Bruce County town of Walkerton when its drinking water system became contaminated with deadly bacteria from manure that had been spread on a nearby farm. The town's water-treatment plant had failed to remove this contamination.

After the outbreak, the Province established the Walkerton Commission Inquiry (Inquiry) to report on the cause of the contamination and recommend measures to protect sources of drinking water across the province. In 2002, the Inquiry recommended that source water protection plans be developed for each watershed in the province.

In response, the province enacted the *Clean Water Act* (Act) in 2006 to protect existing and future sources of drinking water. The Act and its regulations required that source water protection plans address 21 specific threats to drinking water sources. These threats include waste-disposal sites, sewage systems, commercial fertilizers and pesticides, and road salt.

After the Act was proclaimed, the Ministry of the Environment and Climate Change (Environment Ministry) designated 19 source water protection regions in the province, and established a Source Protection Committee in each to develop source water protection plans. These plans outline policies designed to reduce or eliminate threats to sources of drinking water.

The *Nutrient Management Act*, although not a direct response to Walkerton, also serves to protect drinking water sources by seeking to manage agricultural nutrients such as manure, fertilizer, compost and sewage. Under the *Nutrient Management Act*, large livestock farms that produce significant quantities of manure (300 nutrient units per year, equivalent to manure from roughly 1,800 hogs) must have plans to manage nutrients stored on their properties or spread on fields. These plans must be developed by individuals certified by the Ministry of Agriculture, Food and Rural Affairs (Agriculture Ministry), which is also responsible for approving the nutrient management plans. The Environment Ministry is responsible for enforcing the *Nutrient Management Act*.

At the time of our audit in 2014, we noted that 14 years after the crisis in Walkerton, source water protection plans were still not in place to ensure a first level of defence for drinking water in Ontario. Factors that contributed to this included:

- The Ministry did not have a clear time frame in which to approve source water protection plans. At the time of our audit, the Ministry had approved only three of the 22 source water protection plans that had been developed. In addition, seven of the 22 plans submitted to the Ministry were incomplete because they did not include water budget studies to identify threats to water quantity within their region.
- The Ministry lacked a long-term strategy to ensure that municipalities and Conservation Authorities had the funding to implement the plans once approved, and that the plans remained current.

We also noted the following weaknesses in the source water protection plans:

- The plans did not address all potential threats, including those posed by spills from industrial and commercial facilities, to drinking water intakes in the Great Lakes.
- Private wells or intakes that serve single residences were excluded from source water protection planning. For the estimated 1.6 million Ontarians who get their drinking water from private wells, protecting source water is the only line of defence.
- The plans did not address the risks posed by abandoned wells to groundwater. A study estimated that Ontario has 730,000 abandoned wells, many of which may not have been decommissioned properly.

We also noted that since passage of the *Nutrient Management Act* in 2002, phosphorous and nitrogen contamination has continued to grow in the province's agricultural watersheds. Noncompliance with the *Nutrient Management Act*, and the Ministry's weak enforcement, increased the risk that source water is not effectively protected. In this regard, we found that:

- Only a limited number of farms that produce and use manure were required to comply with the *Nutrient Management Act* and its regulations. For example, the farm that was the source of contamination in Walkerton would not have been captured by the Act because it was too small.
- Neither the Environment Ministry nor the Agriculture Ministry had information on the total number of farms that produce manure and need to manage it in accordance with

the Act. Both ministries relied on education and outreach to ensure that farms self-report whether they meet the conditions in the regulations under the Act.

- In 2013/14, the Environment Ministry inspected only 3% of the farms that were known to be subject to the Act's regulations for the proper storage and application of manure. Where non-compliance was identified, the Ministry often did not follow up, and it rarely imposed punitive measures.

Lastly, we noted that the Ministry was only recovering about $200,000 of the $9.5 million in direct annual program costs attributable to industrial and commercial facilities that take water for use in their operations. The low cost-recovery rate was due to the low fees paid by the limited number of companies drawing large volumes of water. At the time, 60 industrial and commercial users paid only $3.71 for every million litres that they drew.

We made a number of recommendations for improvement and received commitments from the Ministry that it would take action to address our recommendations.

Status of Actions Taken on Recommendations

According to information we received from the Environment Ministry, some of the recommendations in our *2014 Annual Report* have been implemented by it and by the Agriculture Ministry.

For example, the Environment Ministry has approved all 22 source water protection plans developed for the province's 19 source water protection regions. The Environment Ministry has also identified all remaining municipalities that were eligible to receive one-time funding to help implement the policies in source protection plans. In addition, in the spring of 2016, the Environment Ministry signed funding agreements with all 19 Source Protection Committees to help them provide support to municipalities for plan implementation.

With regard to the administration of the *Nutrient Management Act*, the Agriculture Ministry has gathered information on the number of farms in the province that had to manage the storage and application of manure in accordance with the Act. Using this data, the Environment Ministry began using a risk-based approach in 2015/16 to select farms for inspection.

We also noted that progress has been made on many of the recommendations. For example, 11 of the 17 water budget studies that were outstanding at the time of our audit have since been completed. These water budget studies help determine how much water is available for human use while ensuring there is also enough left to support natural processes. In addition, the Environment Ministry is currently in the process of:

- updating its technical framework for assessing the significance of threats to drinking water intakes;
- reviewing the regulations and sections of the *Ontario Water Resources Act* that pertain to wells to determine what changes are needed to, for example, ensure that abandoned wells are decommissioned properly; and
- assessing the feasibility of using new administrative monetary penalties as punitive measures when inspections identify violations.

Three recommendations will take more time to fully address, specifically those aimed at:

- considering the feasibility of requiring source water protection plans to address threats to sources of water that supply private wells;
- phasing in remaining farms in Ontario that generate or apply nutrients so that they also must adhere to the requirements of the *Nutrient Management Act*; and
- updating the Ministry's water-taking charges to improve cost recovery.

The status of actions taken on each of our recommendations is described in the following sections.

Delays in Source Water Protection Plan Approval and Implementation

Recommendation 1

To ensure that source water protection plans are reviewed, approved and implemented in a timely manner, the Ministry of the Environment and Climate Change should:

- *internally set a firm commitment of when plans should be approved and then review its current staffing of key personnel responsible for reviewing and approving plans to ensure it is sufficient to meet the commitment;*
  Status: Fully implemented.

Details

During our 2014 audit, we noted that 22 source water protection plans had been developed by the Source Protection Committees for the province's 19 regions. However, only three of the 22 plans had been approved by the Ministry. At the time, the Ministry stated that its goal was to have all plans approved by the end of 2015. Following our audit, the Ministry developed a strategy with established timelines and resources for the timely approval of each plan. All 22 source water protection plans were approved as of December 2015.

Seven Regions Lacked Water Budget Studies Needed to Complete Their Source Water Protection Plans for Approval

- *work with Source Protection Committees to ensure that outstanding water budget studies are completed and submitted as soon as possible; and*
  Status: In the process of being implemented by March 2017.

Details

The *Clean Water Act* requires source water protection plans to address threats to both water quality and quantity. Water quantity threats were identified in 12 of the 19 regions, which required those regions to conduct a more detailed water budget study to assess the significance of the threat. Water budget studies help determine how much water is available for human use while ensuring there is enough left to support natural processes.

At the time of our audit in 2014, we noted that seven of the 12 regions that had to conduct water budget studies had not submitted 17 studies for their regions.

At the time of our follow-up, six water budget studies from three regions had not yet been submitted to the Ministry. The Ministry had already approved the source water protection plans for these regions between April 2015 and July 2016. The Ministry informed us that it had approved the plans because preliminary water budgets had been completed to assess water quality stress levels in the watersheds within these regions. Detailed water quantity risk assessments and water budget studies from these regions must be submitted to the Ministry between December 2016 and March 2017. The Ministry expects the results of the water budget studies to be incorporated into source water protection plans by November 2018.

Funding Uncertainty for Implementation of Policies in Source Protection Plans

- *in consultation with municipalities and Conservation Authorities, devise an approach to fund the implementation of many of the policies within the plans once the plans are approved.*
  Status: Fully implemented.

Details

The 22 source water protection plans approved by the Ministry contain over 12,500 policies designed to reduce or eliminate threats against sources of drinking water. Municipalities and Conservation Authorities are responsible for implementing about two-thirds of these policies. At the time of our

2014 audit, the Ministry did not have a long-term strategy to address funding of municipalities and Conservation Authorities to ensure that source water protection plans were properly implemented once approved.

In the spring of 2016, the Ministry signed capacity funding agreements to provide amounts ranging from $43,000 to $1.6 million in 2016/17 to all 19 Source Protection Committees to support the implementation of the source protection plans. The funding is intended to help the Committees provide technical advice to municipalities on issues such as policy interpretation, provide training related to the policies, and facilitate municipal working groups to resolve issues.

The Ministry stated that municipalities and Conservation Authorities generally have to implement the policies in the source water protection plans within three years of the plans coming into effect. To help Source Protection Committees provide support during the implementation of the policies, the Ministry plans to continue to provide funding until 2017/18.

Recommendation 2

In the longer term, the Ministry of the Environment and Climate Change, in conjunction with Source Protection Committees, should develop a strategy that addresses timely updates of the plans to ensure that local threats to source water, and policies that eliminate or mitigate the threats, remain current.

Status: In the process of being implemented by December 2016.

Details

Municipalities and Conservation Authorities are responsible for updating the source water protection plans to ensure that they remain current. At the time of our 2014 audit, the Ministry did not have a long-term strategy for timely updates of the plans.

The *Clean Water Act* requires that, when a source water protection plan is approved, an order must also be given that governs the review of the plan. Since our audit, the Ministry has issued orders to all Source Protection Committees requiring them to review and update their source water protection plans by specified dates—usually within three years after the source protection plans come into effect.

Twenty of the Source Protection Committees were ordered to submit work plans to the Ministry describing the steps they will take to review the plans, including which portions of the plans will be reviewed, the rationale and time frames for each step of the review, as well as the public consultation that will be undertaken for the review. The first two work plans must be submitted to the Ministry by November 2017. Fifteen more are due by November 2018, and the last three are due by November 2019.

The Ministry is developing a guidance document to help the Source Protection Committees prepare these work plans. At the time of the drafting of this report, the Ministry expects to finalize the guidance document by December 2016.

The Ministry's strategy is to assign the work plans on a first-come, first-served basis to one of four staff responsible for reviewing them. The Ministry will re-assess this strategy if the reviews are not completed in a timely manner. At the time of our follow-up, the Ministry had not assessed whether four staff would be enough to review the 15 work plans expected in November 2018; nor had it established a time frame by which the plan reviews must be completed.

For the two Source Protection Committees that are not required to submit a work plan, their source water protection plans will be reviewed when the region's Official Plans, which describes land-use planning policies, are reviewed in 2018 and 2019.

Ministry Framework Does Not Identify All Significant Threats to Source Water

Recommendation 3

To strengthen source water protection and better ensure all significant threats are identified and

addressed, the Ministry of the Environment and Climate Change should ensure that the data and assumptions used in its framework for assessing the significance of threats to drinking water intakes in the various regions of the province are current and properly enable significant threats to be classified as such.

Status: In the process of being implemented by January 2017.

Details

When developing and updating source water protection plans, Source Protection Committees use the Ministry's framework of technical rules to assess the significance of threats to drinking water.

At the time of our 2014 audit, Source Protection Committees and Conservation Authorities informed us that the Ministry's framework was outdated, and did not allow them to sufficiently classify threats as significant. For example, threats related to petroleum products transported in pipelines, transportation of hazardous substances across or near surface water, application of road salt, and storage of snow could not be assessed as significant using the Ministry's current framework.

The Ministry held four formal discussions with Source Protection Committee chairs and Conservation Authorities from October 2014 to March 2016 to determine what changes are needed to its framework. Based on those discussions, the Ministry developed a list of proposed changes that will, for example, allow Source Protection Committees to assign vulnerability scores for large bodies of water and introduce a new method for assessing the risk from the use of road salt.

As required under the *Environmental Bill of Rights*, the Ministry posted the updated technical framework on the Environmental Registry for public review in September 2016. Once the public consultation process is completed, the Ministry expects the updated framework to be finalized by January 2017.

In addition, in April 2016, the Ministry developed a Standard Operating Procedure for ongoing identification of emerging issues. The procedure document calls for Ministry staff to record any potential and emerging threats identified in their review of source water protection plans, annual progress reports, work plans, and other reports from Source Protection Committees. At the time of our follow-up, the Ministry had not recorded any such threats.

Source Protection Plans Do Not Address All Potential Threats to Drinking Water Intakes in the Great Lakes

Recommendation 4

To ensure that source water protection plans address all potential threats to drinking water intakes in the Great Lakes, the Ministry of the Environment and Climate Change should work with the relevant Conservation Authorities and Source Protection Committees to complete an inventory of all conditions and near-shore activities that pose a threat to the intakes, assess the conditions, and incorporate into the protection plans ways of dealing with these threats.

Status: In the process of being implemented by November 2019.

Details

During our 2014 audit, Conservation Authorities informed us that only one of the 154 intakes in the Great Lakes was significantly deep and far offshore enough to not be susceptible to unsafe levels of contamination. Source Protection Committees and Conservation Authorities conducted modelling exercises for eight regions where Great Lake intakes exist to determine whether contaminants can reach water intakes at levels high enough to pose a threat to human health. The exercises confirmed that there is in fact a potential for elevated levels of contaminants to reach drinking water intakes in the Great Lakes.

In the spring of 2016, the Ministry began investigating possible sources of information to complete this inventory. One such source is the database of municipal, private and industrial sewage systems

and waste disposal sites from the Ministry's environmental approvals program. The Ministry has compiled a list of sites located within the nearshore boundary. In September 2016, the Ministry provided this list—including maps of their locations—to Source Protection Committees to be used when updating their source water protection plans.

Source Water Protection Plans Do Not Address Risk That Abandoned Wells Pose to Groundwater Sources

Recommendation 5

To strengthen source water protection, the Ministry of the Environment and Climate Change should consider the feasibility of requiring source protection plans to identify and address threats to sources of water that supply private wells and intakes and threats that abandoned wells may pose to sources of groundwater.

Status: Little or no progress on recommendation regarding private wells. Recommendation regarding abandoned wells is in the process of being implemented by spring 2017.

Details

Under a regulation of the *Clean Water Act*, source water protection plans do not have to address threats to sources of water that feed private wells and intakes. During our 2014 audit, we noted that 36% of the 166,000 private-well water samples that were tested by Public Health Ontario in 2013 tested positive for bacteria, including E. coli. Water from these wells that tested positive for bacteria would be regarded as unsafe if private wells were held to the same standards as public drinking water.

At the time of our audit, the Ministry informed us that its focus is on larger drinking water systems, such as the municipal drinking water systems that serve over eight million Ontarians. In addition, the Act authorizes municipalities—provided that the municipal council signs a resolution—to include private wells that serve six or more residences to their source water protection plans. At the time of our follow-up, the Ministry had determined not to fund municipalities that decide to do so.

Private well owners are responsible for maintaining and decommissioning wells. With regard to abandoned wells, we noted in our 2014 audit that an estimated 730,000 wells have been abandoned in Ontario, and many may not have been properly decommissioned. Abandoned wells that have not been properly decommissioned pose a risk to groundwater because they provide open pathways to aquifers, and bypass the natural filtration provided by the different layers of the earth.

In December 2014, the Ministry began reviewing regulations and sections of the *Ontario Water Resources Act* that pertain to private wells. The Ministry's legislative review identified issues related to the following:

- lack of licensing requirement for individuals who decommission wells;
- lack of insurance requirements for abandonment activities; and
- lack of clarity regarding technical aspects related to abandoning a well.

The Ministry is currently developing a proposal to address these issues. The proposal will include recommended options for policy and program changes, timelines and resource needs. The Ministry expects to post the proposed changes on the Environmental Registry in spring 2017 to solicit public input.

As well, in conjunction with the Ministry of Health and Long-Term Care and public health units, the Ministry should put mechanisms in place to notify private well owners when bacterial and chemical levels are known to exceed acceptable levels in their area.

Status: In the process of being implemented by December 2016.

Details

At the time of our 2014 audit, there were no mechanisms in place to notify private-well owners when chemical levels in groundwater exceeded acceptable levels. We noted that in 2013, 31 well locations

contained chemical levels—mainly fluoride and nitrate—that exceeded acceptable drinking water standards by an average of nearly 30%.

In summer 2015, the Environment Ministry and the Ministry of Health and Long-Term Care (Health Ministry) created an advisory group made up of representatives from the local public health units, Conservation Authorities and Ministry staff to review the current notification processes. The Health Ministry and Public Health Ontario are using the results of the advisory group's review to inform new guidance on notification procedures for private-well owners under the Ontario Public Health Standards and Protocols. In September 2016, the Health Ministry distributed a draft of this guidance document to members of the advisory group for review and feedback.

In addition, the Environment Ministry is developing a set of fact sheets for use by local public health units. These fact sheets contain information on contaminants that pose threats to private well-water quality, and are expected to be finalized by December 2016.

Some Eligible Municipalities Left Out of One-Time Funding for Source Protection Plan Implementation

Recommendation 6

To better ensure that any future funding to municipalities for the implementation of source protection plans is allocated fairly to achieve intended objectives, the Ministry of the Environment and Climate Change should ensure all eligible municipalities are identified before distributing funds.

Status: Fully implemented.

Details

In 2013, the Ministry received one-time approval to provide $13.5 million over three years to eligible municipalities to help them implement source water protection plans. The Ministry distributed the amount through the Source Protection Municipal Implementation Fund, which provided grants between $18,000 and $100,000 to eligible municipalities based on a formula that considered the number of threats identified in the source water protection plans.

In our 2014 audit, we noted that the Ministry had committed the entirety of the funds to 189 eligible municipalities before all municipalities had finished verifying the threat counts. As a result, other eligible municipalities received no funding because all the funds had already been allocated to the 189 municipalities.

After our audit, the Ministry identified 11 additional municipalities that were eligible for funding, and allocated an additional $466,000 to them in 2015/16, with a further $404,000 planned for 2016/17. The Ministry confirmed with Source Protection Authorities that no other municipalities were eligible for funding. The Ministry also extended the program's original expiry date by one year, to March 31, 2017.

Many Farms in the Province Do Not Have to Adhere to the *Nutrient Management Act* and Its Regulations

Recommendation 7

To better ensure that the objectives of the Nutrient Management Act *are being met, the Ministry of the Environment and Climate Change, together with the Ministry of Agriculture Food and Rural Affairs, should develop an approach to gather information on the total number of farms in the province that need to manage nutrients in accordance with the* Nutrient Management Act *and its regulations.*

Status: Fully implemented.

Details

At the time of our 2014 audit, neither the Environment nor the Agriculture ministries had information on the number of farms that produce more than 300 nutrient units of manure and would therefore have to comply with the *Nutrient Management*

Act. We noted that both ministries relied on education and outreach activities to ensure that farms self-reported whether they met the conditions set out in the Act.

Starting in July 2015, the Environment and Agriculture ministries formed a working group to identify the number of unreported large livestock farms in Ontario that need to manage nutrients in accordance with the *Nutrient Management Act*. The working group used the most recent Statistics Canada census data from 2011 to validate the number of large livestock farms already in the Agriculture Ministry's records that have self-reported and prepared nutrient management plans.

The Agriculture Ministry's analysis of the 2011 census data indicated that there are 1,149 large livestock farms currently operating in Ontario, or 71 more than the 1,078 that have self-reported and prepared nutrient management plans. The Agriculture Ministry had expected differences because the two data sets were based on different time frames and units of measurement. Specifically, the 2011 census data classified farms by the number of animals, while the Ministry records classified farms by nutrient units. Given these differences, the Agriculture Ministry concluded that there was insufficient evidence to warrant a concern that a significant number of farms have not self-reported, and therefore, no further action was needed to determine whether the 71 farms met the conditions outlined in the Act.

Moreover, farms that must comply with the Act will be identified when they apply for a municipal building permit for their manure storage facilities or barns. Municipalities must consider the requirements under the Act when issuing the building permits.

Recommendation 8

The Ministry of the Environment and Climate Change, in conjunction with the Ministry of Agriculture, Food and Rural Affairs, should phase-in the remaining farms in Ontario that generate or apply nutrients so that they also must adhere to the requirements of the Nutrient Management Act *and its regulations.*

Status: Little or no progress.

Details

Some regulatory requirements under the *Nutrient Management Act* apply only to large livestock farms that produce over 300 nutrient units of manure, so many smaller farms are not covered. For example, the farm that was the source of the contamination in Walkerton's drinking water generated only about 60 nutrient units of manure, and so would not have been subject to the Act.

During our 2014 audit, we calculated—based on the Statistics Canada census data from 2011—that 1.8 million nutrient units were produced in Ontario annually, but that nutrient management plans were required for only 800,000 units.

In addition, the regulatory requirements under the *Nutrient Management Act* apply only to farms that have livestock. However, many farms without livestock use manure as crop fertilizer. Our 2014 audit determined that commercial fertilizer was applied to approximately 2.4 million hectares of farmland in Ontario, but only 250,000 hectares were covered by the Act.

In response to our recommendation in 2014, the Environment and Agriculture ministries stated that if nutrients are used in significant risk areas, farming activities, regardless of size, are captured under the *Clean Water Act*. Since early 2016, both ministries have been in consultation to determine whether applying the *Nutrient Management Act* to additional farms would enhance protection.

At the time of our follow-up, the ministries had not decided whether to expand the scope of the Act. The Ministries are examining various mechanisms (including amendments to regulatory requirements) to address risks posed by farm contaminants such as phosphorus. For example, in 2016, Canada and the United States established a target to reduce phosphorus levels entering Lake Erie by 40% as part of the Great Lakes Water Quality Agreement, which involves all levels of government. The

ministries are considering how risks posed by farm contaminants can be addressed through actions to support the targets. In October 2016, the Environment Ministry posted its proposed actions on the Environmental Registry for public review. The actions included working with the agriculture sector to enhance its outreach to farmers to promote the application of nutrients at the right time and imposing tighter restrictions on application of nutrients during the non-growing season.

Ministry's Enforcement of the *Nutrient Management Act* Is Limited

Recommendation 9

To better ensure that the Nutrient Management Act *and its regulations are being enforced, the Ministry of the Environment and Climate Change should:*

- *Set appropriate inspection targets that fully utilize inspection staff and maximize the number of inspections being performed;*
  Status: Fully implemented.

Details

During our 2014 audit, we noted that the Environment Ministry could target and complete more farm inspections than it was doing. For example, in 2013/14, the Ministry's goal was for its 17 inspectors to inspect 336 farms. This equated to less than one farm inspection every two weeks per inspector. We noted that over half of inspections took no longer than a day to perform, with the remainder taking a couple of days. Despite this, the Ministry did not meet its inspection target in 2013/14, performing only 269 of the 336 planned inspections.

In 2015/16, the Ministry's goal was to conduct 388 inspections. The target was based on the principle that inspections should account for approximately 40% of its inspectors' workload. The Ministry's rationale for this is that inspectors perform other duties beyond inspection, such as responding to complaints and conducting outreach activities. Inspection targets are also set at the regional level, which allows the Ministry's regional staff to balance the workload across regions based on the circumstances.

The Ministry's 14 inspectors conducted 370 inspections in 2015/16, or an average of about 26 inspections each. In comparison, the 17 inspectors performed approximately 15 inspections each in 2013/14.

- *Use appropriate risk-based criteria to select farms for inspection; and*
  Status: Fully implemented.

Details

We found in our 2014 audit that inspections were not completed using a risk-based framework. Instead, inspectors had the discretion to select which farms to inspect. Given the small percentage of farms that receive inspections, risk-based selection is required to maximize Ministry resources. By conducting a formal risk assessment, the Ministry could target farms most likely to be in non-compliance, and whose non-compliance was most likely to cause environmental harm.

In March 2015, the Environment Ministry obtained data from the Agriculture Ministry regarding farms with approved nutrient management plans. The data included farm size and location, number of animals, nutrient units produced, area of land where nutrients are applied, and the length of time nutrients were stored. The Ministry used these factors to develop a risk-ranked list of farms for inspection in 2015/16. The Ministry also considered other risk factors to rank the farms, such as the status of the farm's management strategy and risks to source water. For example, inspections placed particular emphasis on farms in vulnerable areas where the storage of nutrients was a significant threat. The Ministry inspected 20 of the 113 farms that it identified as high-risk in 2015/16.

- *Follow up on any noted cases of non-compliance and encourage compliance by using, where*

necessary, all available punitive measures, such as offence notices.

Status: In the process of being implemented by spring of 2017.

Details

In our 2014 audit, we noted that despite the results of its inspections, the Ministry rarely used punitive measures such as issuing offence notices, which could result in fines set by provincial courts. About half of the farms that had been inspected in 2012/13 and 2013/14 were found to be non-compliant with the *Nutrient Management Act*, and in half of those cases, the non-compliance posed a risk to the environment and human health.

The Ministry is currently assessing the feasibility of using administrative monetary penalties to allow the Ministry to more easily impose fines for a range of offences using fewer resources. The Ministry is conducting a preliminary analysis and internal consultation, the first of five steps in the process to implement such a system. After this, the Ministry will need to conduct further jurisdictional research and stakeholder consultation to inform its submission to Cabinet to seek approval for the framework. Its goal is to determine the necessary legislative and regulatory changes by spring 2017.

In order to follow up on cases of non-compliance, in 2015, the Ministry implemented a tracking mechanism in its current information system that will send reminders to inspectors when deadlines for voluntary abatement actions expire. The Ministry will also be able to produce reports on the current status of identified cases of non-compliance. The Ministry plans to generate this report annually beginning in 2016/17. At our request, the Ministry produced such a report, which showed that 21% of the 370 farms inspected in 2015/16 were found to be non-compliant. We noted that in 22% of cases where voluntary abatement actions were in place, the issues of non-compliance were still not addressed at the time of our follow-up. In August 2016, the Ministry developed guidelines for its staff to use when following up on non-compliances.

The Ministry's Water-Taking Charges Are Insufficient to Recover Program Costs

Recommendation 10

To ensure the Ministry of the Environment and Climate Change (Ministry) will be able to recover the province's cost of administering its water quantity management programs, and to ensure the sustainability of sources of water in the province, the Ministry should:

- *Charge industrial and commercial users of either surface or groundwater sources in Ontario an appropriate fee; and*

  Status: Little or no progress.

Details

Since 1961, anyone taking more than 50,000 litres of water per day from either surface or groundwater sources in Ontario requires a Permit to Take Water from the Environment Ministry. This includes taking water for commercial, industrial, construction, institutional, agricultural and recreational purposes.

In 2009, the government passed a regulation under the *Ontario Water Resources Act* that allowed the Ministry to begin charging industrial and commercial companies that take high quantities of water, such as water-bottling companies and those that incorporate water into their products. These companies accounted for about 1% or 60 of the over 6,000 permit holders at the time of our audit in 2014, and they were charged $3.71 per million litres of water. Other industrial and commercial users of water such as mines, thermal power companies, pulp and paper mills and steel mills, needed permits but did not have to pay water-taking fees. These companies accounted for 23% of all the permit holders at the time.

The regulation also requires the Ministry to review the water charge every five years beginning in 2012. The Ministry's 2012 review of its water-taking charges found that it recovered only about $200,000 of the $9.5 million in costs directly attributable to industrial and commercial users. At the time of our audit in 2014, the Ministry had begun working on proposals to Treasury Board and Management Board of Cabinet to increase the current charge for companies that take high quantities of water, and phase in new charges for the other industrial and commercial users.

In June 2016, the Ministry developed a proposal to begin charging the other industrial and commercial users, and gradually increase the rates charged to these users. The proposal estimated that the Ministry will receive about $7.3 million annually from 1,700 users. However, the Ministry informed us that further work to obtain final approval for this proposal has been postponed until it is farther along with implementation of the cap-and-trade program and the Climate Change Action Plan.

In August 2016, the Premier asked the Environment Minister to review pricing options for water takings by water bottling facilities. In October 2016, the Ministry proposed a regulation to establish a moratorium on the issuance of new or expanded permits for water bottling until January 1, 2019. The moratorium would prohibit any new or increased use of groundwater for water bottling. The Ministry stated in its proposal that while the moratorium is in place it would examine a range of pricing mechanisms.

Ministry Does Not Use All Information When Issuing Water Permits

- *refer to relevant water budget studies prepared by Conservation Authorities when deciding to issue water-taking permits.*

  Status: Fully implemented.

Details

The *Ontario Water Resources Act* requires that the Ministry consider the use of all available and relevant information such as water budget studies when issuing water-taking permits. At the time of our 2014 audit, we found that Ministry staff were not using the information from the water quantity studies in evaluating and granting applications for Permits to Take Water.

After our audit, the Ministry established a working group to develop guidance on integrating source protection water budget information into the Permit to Take Water program. In April 2016, the Ministry finalized its Standard Operating Procedure for integrating results of water budgets into the Ministry staff's review of permit applications. The procedure document also includes instructions to review existing permits in vulnerable areas where water budget studies have identified significant water quantity risks. In September 2016, the Ministry provided training to its staff on the use of the Standard Operating Procedure, after which it was to be integrated into the review process for permit applications.

In its October 2016 moratorium proposal, the Ministry also stated that it would review the existing rules governing water takings to determine if they are adequate to protect and conserve water resources.

Chapter 2

Follow-Up Reports on Special Reports

Summary

Under Section 17 of the *Auditor General Act*, we perform special assignments as requested by the Standing Committee on Public Accounts (Committee) or by a Minister of the Crown, but these activities shall not take precedence over the other duties of the Auditor General under the Act. It is our practice to make specific recommendations in our special reports and ask ministries, agencies of the Crown and organizations in the broader public sector to provide a written response to each recommendation, which we include when we publish these audit reports. Our follow-up on the status of these recommendations consists primarily of inquiries and discussions with the government, the relevant ministries or broader public sector entities and a review of selected supporting documentation. In a few cases, the organization's internal auditors also assisted us with this work. As this is not an audit, we cannot provide a high level of assurance that the corrective actions described have been implemented effectively. The actions taken or planned may be more fully examined and reported on in future audits. Status reports will be considered in deciding whether future audits should be conducted in these same areas.

This Chapter provides an update on the status of actions taken to address our recommendations in the following special reports.

- **Ontario Lottery and Gaming Corporation's (OLG) Modernization Plan**—Due to the nature of the request from the Committee for this Special Report (tabled in April 2014), this report did not contain any recommendations; however, we committed to issuing an update on the status of the Plan once all associated procurement was complete. At the time of the Special Report, OLG was expected to complete all modernization-related procurements by March 2015. As of September 30, 2016, the procurement completion date had been extended to August 2018. While we plan to issue another update at that time, we are providing a two-year status update in the interim.
- **Ornge Air Ambulance and Related Services**—Our Special Report was tabled in March 2012. We conducted a follow-up this year in response to a request as noted in the 2014 Summary Report tabled by the Standing Committee on Public Accounts on their review of Ornge Air Ambulance and its Related Services. Overall, progress has been made toward implementing 72% of our recommended actions, including 61% that have been fully implemented. More

work is needed on the remainder. The Committee's Summary Report also listed a number of concerns, including those from the Committee's prior Interim Report on Ornge. The Summary Report indicated that the Committee wanted the Ministry of Health and Long-Term Care and Ornge to take the necessary steps to address its concerns in a timely manner. We also followed up on the Committee's concerns as summarized in **Chapter 3, Section 3.05** of this report.

- **Winter Highway Maintenance**—Our Special Report was tabled in March 2015. In response, the Minister of Transportation requested that our Office conduct a follow-up review of the winter maintenance program in 2015/16 in order to provide an update on the Ministry's progress. As noted in **Figure 1**, overall progress has been made toward implementing 84% of our 19 recommended actions, including full implementation of 42% or eight of them within the last year. More work is needed on 11% or two recommended actions and 5% or one recommendation will not be implemented.

More specific details on the follow-ups on these reports are presented in the sections that follow **Figure 1**.

Figure 1: Overall Status of Implementation of Recommendations from Our Special Reports

Prepared by the Office of the Auditor General of Ontario

			Status of Actions Recommended			
Special Report	**# of Recs**	**# of Actions Recommended**	**Fully Implemented**	**In Process of Being Implemented**	**Little or No Progress**	**Will Not Be Implemented**
2.01 Ontario Lottery and Gaming Corporation's Modernization Plan	As this report did not include recommendations, we followed up on the status of the Modernization Plan.					
2.02 Ornge Air Ambulance and Related Services	5	18	11	2	4	1
2.03 Winter Highway Maintenance	8	19	8	8	2	1
Total	**13**	**37**	**19**	**10**	**6**	**2**
%		**100**	**51**	**27**	**16**	**6**

Chapter 2
Section
2.01

Ontario Lottery and Gaming Corporation's Modernization Plan

Follow-Up on *April 2014 Special Report*

Status of Modernization Plan as of September 2016

The implementation of the Ontario Lottery and Gaming Corporation's (OLG's) Modernization Plan, which was to take place over the six-year period ending March 31, 2018, has been delayed for many reasons, including municipalities needing more time to respond to OLG's plans; some municipalities rejecting new gaming facilities or the relocation of existing gaming facilities; OLG's procurement processes taking longer than planned; launches of new OLG initiatives taking longer than planned; delays in negotiating lease agreements with racetracks; and the government's decision to integrate horse racing into the Modernization Plan.

On September 23, 2016, OLG cancelled the Request for Proposals (RFP) for the lottery network in favour of a revised modernization approach. Under the revised approach, OLG plans to increase its lottery revenues with enhancements to its technology and innovation capabilities through partnerships with the private sector. As of September 30, 2016 (as shown in **Figure 1**), the procurement process for selecting private-sector operators for casinos in seven regions of the province was still in progress, with a planned completion date of August 2018, almost six years later than the original projected timeline.

As of September 30, 2016, OLG's latest projection of net profit to the province (NPP) for the six-year period from April 1, 2012, to March 31, 2018, was an estimated $11.811 billion, down $3.525 billion from the 2012 NPP projection of $15.336 billion.

In 2012, OLG estimated total NPP even without modernization—in other words, without changing anything—for the same six years would be $10.712 billion, or only about $1.1 billion less than the 2016 projections that include modernization. That $1.1 billion difference dropped further, to just $639 million, after the province incurred unanticipated costs of $461 million during the same six years to support the horse-racing industry.

As of September 2016, OLG's full modernization benefits have been deferred to the 2021/22 fiscal year. The additional annual NPP attributable to modernization has also been reduced to $889 million starting in 2021/22, four years behind schedule and only 70% of the originally projected benefits of $1.3 billion annually starting in 2017/18. The $889 million in additional annual NPP from modernization includes a projected $209 million from modernized lottery operations. However, as of September 23, 2016, the initial lottery modernization approach had been cancelled, putting the $209 million projection in question until a new approach is finalized. As of the

Figure 1: Status of OLG s March 2012 Modernization Plan Activities as of September 2016

Source of data: OLG

Activity and Original Planned Completion Date	What's Been Done	What's Left to Do as of September 30, 2016 and a Revised Completion Date
Reconfiguration of the number of gaming facilities and tailoring the types of gaming activities made available at each location **(Summer 2012)**	• Gaming business model developed • 29 gaming zones (areas where a gaming facility is permitted to operate) were established and later reduced to 28 zones (24 of them have existing gaming facilities) • New statutory regulation in force replacing public referendum with other requirements for establishing a new gaming facility in a municipality • Responses obtained from municipalities to OLG's proposed changes, locations and types of gaming facilities	• Finalize locations and reconfigure gaming facilities in zones on the basis of municipal approvals received (**No revised completion date**, but will be after August 2018, the revised completion date for securing private-sector operators)
Securing private-sector operators for gaming zones, who will be responsible for all funding, building and operation of all gaming facilities **(December 2012)**	• 25 of 28 gaming zones grouped into 7 larger bundles for private-sector operator service-delivery bidding • 3 gaming zones including 3 existing resort casinos subsequently removed from bidding process • Requests for pre-qualification of bidders issued for all 7 bundles and qualified bidders notified for 4 of the 7 bundles • Requests for proposals issued for 4 of the 7 gaming bundles to eligible private-sector operators to take over operations • Niagara bundle added as the 8th bundle covering 2 gaming zones • Contract reached with the successful private-sector operator selected for the East gaming bundle	• Prequalified bidders eligible to participate in the request-for-proposal process to be notified for 3 of the original 7 bundles • Issue and evaluate submissions for pre-qualification of bidders for the Niagara bundle • Issue requests for proposals to eligible private-sector operators to take over operations for 4 gaming bundles (Ottawa, West GTA, Central and Niagara) • Award contracts to private-sector operators for the remaining 7 gaming bundles and transition day-to-day operations of existing gaming facilities • Operators to open new and relocated gaming facilities • Determine strategy for Caesars Windsor (**August 2018** for the awarding of gaming zones to private-sector operators)
Implementation of new, consistent hosting fee model for municipalities with gaming facilities **(Late 2014)**	• New hosting fee rates announced in May 2013 • All 23 host municipalities have signed new hosting fee agreements with OLG	• Completed
Securing a private-sector operator for lottery network operations **(December 2012)**	• Request for pre-qualification issued • Evaluated submissions for pre-qualification of bidders • Issued requests for proposals to eligible private-sector operators	• On Sept 23, 2016, OLG cancelled the current Request for Proposals (RFP) for Lottery in favour of a revised modernization approach (**No revised completion date** for the new lottery modernization approach)

Activity and Original Planned Completion Date	What's Been Done	What's Left to Do as of September 30, 2016 and Revised Completion Date
Expansion of lottery ticket sales to large multi-lane retail outlets **(Late 2015)**	• Letter of Intent signed with one grocery partner	• Finalize two multi-lane technology solutions with two key grocery partners • Finalize contracts with technology solution providers; design, build, implement and deploy two solutions for the two grocery partners (**September 2018** for the two grocery partners)
Ending Slots At Racetracks Program **(March 31, 2013)**	• End of program funding announced in March 2012 Budget • Program funding ended March 31, 2013 • Premier announced in May 2013 that horse racing will be integrated into the Modernization Plan and OLG will find new revenue streams for the industry • Transition plan announced in October 2013 worth up to $400 million over 5 years. Increased to $500 million in March 2014 • In January 2015, Minister of Finance instructed OLG to create a new line of business focused on horse-racing integration activities • In April 2016, OLG created its new line of business that is focused on horse-racing integration activities. • In the February 2016 Budget, Ontario government announced extension of the horse-racing funding program for two additional years beyond March 2019, to March 2021.	• Continue to explore potential horse-themed lottery products and provide business, marketing and responsible gambling expertise to the horse-racing industry • Extend the racetrack funding agreements, which currently expire on March 31, 2019, for two additional years to March 31, 2021 • Finalize a long-term commercial funding arrangement for the horse-racing industry (**Ongoing with no completion date set**)
Optimization of gaming facilities beyond slots at racetracks (April 2012—closed 3 slots and racetracks) (winter 2013—2 new temporary gaming facilities) (late 2015—10 new permanent gaming facilities) (late 2016—2 new permanent gaming facilities)	• 3 slots at racetracks closed in April 2012 • Municipalities informed of proposed relocations and/or plans for new casinos and have responded with approvals or rejections	• Secure private-sector operators for gaming zones • Private-sector operators to determine new locations for gaming facilities where municipalities have approved relocations of existing gaming facilities or new casinos • Obtain necessary approvals from OLG, the AGCO, municipalities and Minister of Finance for relocation of existing gaming facilities or new casinos • Establish all temporary and permanent gaming facilities (**No revised completion date**, but will be after August 2018, the revised completion date for securing private-sector operators)

Activity and Original Planned Completion Date	What's Been Done	What's Left to Do as of September 30, 2016 and Revised Completion Date
Implementation of Internet gaming **(Late 2011)**	• Request for proposals issued • 5-year contract signed with a private operator to manage day-to-day Internet gaming operations • Internet gaming launched publicly in January 2015	• Completed
Revitalizing charitable gaming by converting participating existing bingo halls to electronic bingo centres **(December 2013)**	• 8-year contract signed with a private vendor to accelerate development and installation of electronic bingo and other products • 32 of 42 participating bingo halls have been converted to electronic bingo centres and one has since closed	• Further conversion of bingo halls to electronic bingo centres has been put on hold pending discussions with the industry (**No completion date set**)
Enhancement of responsible gambling programming (**End of 2014**—complete accreditation of all gaming facilities) (no specific dates provided for integrating existing resources and tools in all new gaming offerings)	• All 24 gaming facilities achieved responsible gambling accreditation from an independent, not-for-profit organization (Responsible Gambling Council) • Responsible gambling accreditation achieved for Internet gaming	• New initiative added to apply OLG's responsible gambling expertise within the horse-racing industry (**December 2016** for OLG to provide advice; no implementation date set. Ministry of Finance and horse-racing industry to finalize implementation)

2015/16 fiscal year, OLG had only achieved around $300 million (34%) of the $889 million projected NPP increase. The remaining $589 million NPP increase was projected to occur over the next six years. As with any long-term financial projections, estimates are based on a number of business assumptions that will likely evolve over time.

Background

OLG Modernization in 2012

In July 2010, the provincial cabinet directed OLG to work with the Ministry of Finance (Ministry) to increase net provincial revenue by modernizing commercial and charitable gaming. This request included expanding charitable gaming to allow bingo halls to have electronic games; developing Internet gaming (including a process for private-sector vendors to deliver Internet gaming with appropriate oversight); and conducting a strategic business review of land-based gaming facilities and a review of the lottery distribution network, with a report to be submitted to Cabinet by late 2011.

In February 2012, the Ministry reported back to Cabinet with OLG's Modernization Plan. The Ministry received approval for OLG to work with it to increase net profit to the province by optimizing and expanding land-based gaming and the lottery distribution network.

For land-based gaming, the approved changes included:

- closing slot facilities at three racetracks and relocating six slot-at-racetrack facilities and one OLG casino;
- introducing five new gaming facilities in underserviced communities;
- terminating all site-holder agreements with racetrack operators; and
- competitively outsourcing the day-to-day operations of OLG gaming facilities to private-sector operators and having them fund new

capital development and buy existing OLG capital gaming assets.

For the lottery distribution network, the approved changes included:

- competitively selecting one or more private-sector operators to purchase existing lottery terminals and distribute new lottery terminals to retailers; and
- increasing distribution channels by introducing multi-lane sales at major retail outlets.

For socially responsible gambling, the approved changes included:

- continuing to have no video lottery terminals (slot machines) in commercial businesses, such as restaurants and bars; and
- having OLG incorporate the Alcohol and Gaming Commission of Ontario's (AGCO's) responsible gambling standards into its contracts with private-sector operators.

The Modernization Plan outlined the following projected financial, capital investment and employment gains to the Ontario gaming industry, which were to be achieved by March 31, 2018:

- an additional cumulative $4.6 billion in net profit to the province (between April 1, 2012, and March 31, 2018) from modernization initiatives;
- an additional $1.3 billion in annual net profits to the province starting April 1, 2017, and expected to be sustainable thereafter;
- about $3 billion in new private-sector capital investment in Ontario;
- about 2,300 net new gaming-industry jobs; and
- 4,000 net new jobs in the hospitality, entertainment and retail sectors.

2014 Special Report

In April 2013, the Legislative Assembly's Standing Committee on Public Accounts passed a seven-part motion, outlined in **Figure 2**, asking the Auditor General to look at various aspects of the OLG's Modernization Plan, including the cancelling of the Slots At Racetracks Program.

Overall, our April 2014 Special Report noted the following:

- The Modernization Plan had an overly ambitious timeline. The Modernization Plan included a significant number of changes and

Figure 2: Excerpt of the Public Accounts Committee Motion

Source of data: Standing Committee on Public Accounts

Motion
Whether the province or the corporation has conducted a broad enough consultation process to ascertain whether or not new casinos are welcome in various communities throughout Ontario
Whether the corporation has employed or is employing a clear, consistent and transparent process for tendering, contracting and planning for any and all new or proposed casinos, gaming facilities, bingo halls, online gaming and lotteries throughout Ontario
Whether the host-city-payment formulas for casinos or other gaming facilities are clear, consistent and transparent across the province and whether any special, secret or "one-off" deals are being negotiated between different municipalities for different reasons
Whether provincial or local revenue projections and local economic impact assessments for new casinos and other gaming facilities have been undertaken and are clear, fair and transparent
Whether the province and/or the corporation has adequately taken into consideration community impacts on mental health and/or addiction matters related to the implementation of the new "modernization" plan
Whether the impact of cancelling the Slots At Racetracks Program on Ontario's horse racing industry was measured and whether certain communities have been impacted disproportionately as compared to other communities and if the Liberal government's decision to end the program will be offset by changes in the new modernization plan
Whether the province or the corporation properly consulted or consulted various industries, businesses and municipalities impacted by the cancellation of the Slots At Racetracks Program, and did the province or the corporation assess the economic impact on said industries, businesses and municipalities and factor that into their decision(s)

initiatives that needed to occur within 18 months to achieve net profit projections.

- The Modernization Plan depended on and assumed municipal stakeholder agreement, especially in the case of having a casino in the Greater Toronto Area (GTA). However, more consultation with municipalities was needed to assess the practicalities of getting municipal approval for OLG's plans.
- The Modernization Plan's financial projections were overly optimistic. As of March 2014, OLG had already reduced its six-year estimate of projected revenues by 48% to $2.4 billion, from $4.6 billion in the March 2012 estimate.
- Procurement processes that were followed to the time of our report had been fair, open and transparent.
- The Modernization Plan's job and private-sector capital investment projections were overstated. As of March 2014, the Modernization Plan was scheduled to result in significantly fewer jobs and less private-sector capital investment than had been anticipated.
- The cancellation of the Slots At Racetracks Program was considered in the Modernization Plan but was unexpected by the horse-racing industry. We found that the government had sufficient information to know that without program funding, the number of racetracks could be reduced from 17 to as few as six.
- Some stakeholders had been disproportionately impacted by the cancellation of the Slots At Racetracks Program. Racetracks in three municipalities lost their OLG slot facilities.
- The revised municipal hosting fee was consistent from one municipality to the next, with no secret "one-off" deals (a separate fee was in place with First Nations groups). We found the new municipal hosting fee that had been established was clear and consistent, with no one municipality favoured over another.
- The province and OLG had taken steps prior to modernization to prevent and mitigate problem gambling and they were continuing to do so, as of our Special Report. OLG's Modernization Plan included commitments to continue to promote responsible gambling initiatives.

In our April 2014 Special Report, we committed to issuing an update once all procurement associated with the Modernization Plan was complete. At the time of the Special Report, OLG was expected to complete all modernization-related procurements by March 2015. As of September 30, 2016, the procurement completion date had been postponed to August 2018, and we plan to issue another update at that time. In the interim, we are providing a two-year status update to the Special Report.

Update Details

Consultation with Municipalities on Casinos

A key intent of the Modernization Plan was to make the gaming industry more "customer-focused." This meant making gaming facilities more accessible by locating them in more populated urban areas, and this became the main driver for determining where new casinos should be built. As part of the 2012 Modernization Plan, OLG proposed locations for five new facilities (all of them in more densely populated urban areas) and relocation of six existing slots at racetracks and one casino from mostly suburban areas to more densely populated urban areas. Over 20% of the $1.3 billion new net profits to the province that OLG projected in the Modernization Plan depended on these gaming facility plans being realized. Although this required that municipal councils approve gaming facility locations, our 2014 audit found there was no prior communication or formal consultation with municipalities by OLG or any ministry regarding potential new or relocated casinos. Instead, prior communication with municipalities was limited to some informal discussions between OLG executives and individual city leaders.

After public release of the Modernization Plan in March 2012, OLG advised municipalities of the potential for new gaming facilities in their communities. In June 2012, OLG invited all affected municipalities to attend regional information sessions, where OLG presented background on the Modernization Plan, gaming zones in the region and municipalities' role in establishing new gaming facilities. Upon request, OLG also appeared at city councils and public information sessions hosted by municipalities to present detailed information, such as expected economic impacts, and the steps and timelines of the procurement process. Beginning in 2012, OLG has continued to meet annually with all host municipalities and potential new host municipalities.

At the time of our 2014 audit, most large municipalities, including those in the Greater Toronto Area, Ottawa, Hamilton, Kitchener and Waterloo, had rejected OLG's proposals for locating casinos in more populated urban areas. This significantly reduced the achievement of the revenue projections in the Modernization Plan.

In July 2015, Toronto City Council passed a resolution supporting gaming expansion at Woodbine Racetrack, only if OLG and the private-sector operator (yet to be selected) met a number of planning, economic, social, health and labour conditions. The OLG was required to include the city's conditions into the ongoing procurement process for the GTA gaming bundle. The private-sector operator for the GTA gaming bundle is expected to be selected by November 2017, at which time the city manager is to provide a report back to council assessing how the operator has met or has committed to meeting the city's conditions. At that point, city council would decide whether to maintain or reverse its conditional support of expanded gaming at Woodbine.

Based on conditional municipal support, OLG has reached long-term lease agreements with Woodbine Entertainment Group (WEG) for the Woodbine Racetrack site and to allow the selected private-sector operator to develop a pre-determined number of acres owned by WEG for gaming and non-gaming purposes. With the council's conditional approval for Woodbine expansion, the OLG is expecting significantly stronger bids for the GTA gaming bundle from the major private-sector casino operators. OLG originally expected NPP of $348 million by 2018 for a new GTA casino. The NPP impact of the Woodbine expansion is expected to be significantly lower.

Tendering Contracting and Planning Processes

OLG continues to follow the three-stage procurement process that its board approved in April 2012:

- **Stage 1:** Issue public requests for information (RFIs) to enable OLG to gather data from private sector operators about how gaming and lottery could be improved with their involvement, as well as what the project and procurement risks might be.
- **Stage 2:** Issue public requests for pre-qualification (RFPQs) to enable OLG to determine the abilities of potential respondents and whether they meet OLG's requirements.
- **Stage 3:** Issue requests for proposal (RFPs) to pre-qualified private-sector operators to allow them to make formal bids to operate specific aspects of the gaming and lottery businesses. OLG is to evaluate the bids against a number of stated criteria.

OLG's timelines for procurements and launches of modernization initiatives are discussed in the following subsections.

Timelines for Procurement and Launches of Modernization Plan Initiatives

Land-Based Gaming Facilities

In 2012, OLG planned to have private-sector operators for all 29 gaming zones outlined in the Modernization Plan, with one existing or new gaming facility strategically placed per zone to maximize gaming revenue. In 2012, the gaming zones were

grouped into seven larger gaming bundles, with Niagara Falls added as an eighth gaming bundle in April 2016. The transition to private-sector operators, which includes issuing an RFI and analyzing the results, issuing RFPQs, issuing RFPs and awarding contracts, was to be completed by July 2013. As of March 2014, OLG had updated the projected completion date to June 2015. As of September 30, 2016, OLG had further extended the land-based gaming site procurement timelines by four years from June 2015 to June 2019. The procurement timeline was extended to June 2019 for the Niagara Falls bundle and August 2018 for the other seven gaming bundles.

As of September 30, 2016, OLG's agreement with a private-sector operator had only been completed for one of the eight gaming bundles. As **Figure 3** shows, RFPs to pre-qualified private-sector operators have been issued for three other gaming bundles—North (November 2015), Southwest (November 2015) and GTA (February 2016). RFPs for the four remaining gaming bundles—West GTA (October 2016), Ottawa (October 2016), Central (March 2017) and Niagara (April 2017)—were to be released over the next several months.

East Gaming Bundle Procurement

In September 2015, OLG selected Ontario Gaming East Limited Partnership (OGELP) as the private-sector operator for the East gaming bundle. In January 2016, OLG and OGELP entered into a 20-year Casino Operating and Services Agreement that provides OGELP with an annual fixed service fee and potential to earn higher fees based on exceeding predetermined revenue thresholds. Based on our review and the reports by OLG's Fairness Monitor, the East gaming bundle procurement process followed the approved procurement criteria.

On January 26, 2016, Belleville City Council approved OGELP's gaming site development plans. Construction of the new Belleville casino began in April 2016 with an expected completion date of December 2016.

Niagara Gaming Bundle Added to Modernization Plan in April 2016

On April 1, 2016, OLG announced that it intends to add the two Niagara Casinos—Fallsview Casino Resort and Casino Niagara—to its modernization procurement process. OLG had previously decided that no new private-sector operators would be pursued for three resort casinos in the Windsor and Niagara Falls areas since the cancellation of long-term agreements with the existing private-sector operators would be costly.

In early 2016, OLG's internal cost-benefit analysis of the Niagara Falls casino agreement showed that terminating it would increase OLG's profits over the 20-year expected term of a new service contract. On March 30, 2016, OLG exercised its

Figure 3: OLG's Gaming Bundles—Actual and Expected Procurement Timelines as of September 30, 2016
Source of data: OLG

	RFPQ		RFP		Contract
	Release	**Close**	**Release**	**Close**	**Agreement**
East	**Nov 30, 2012**	**Mar 7, 2013**	**Apr 25, 2014**	**Sep 8, 2015**	**Jan 11, 2016**
North	**Nov 30, 2012**	**Mar 14, 2013**	**Nov 23, 2015**	Feb 2017	Aug 2017
Southwest	**May 30, 2013**	**Aug 8, 2013**	**Nov 23, 2015**	Feb 2017	Aug 2017
GTA	**Dec 12, 2013**	**Sep 10, 2015**	**Feb 11, 2016**	Nov 2017	Mar 2018
Ottawa	**Jun 2, 2016**	**Aug 4, 2016**	Oct 2016	Jun 2017	Dec 2017
West GTA	**Dec 12, 2013**	**Mar 13, 2014**	Oct 2016	Dec 2017	Apr 2018
Central	**Dec 12, 2013**	**Mar 13, 2014**	Mar 2017	Apr 2018	Aug 2018
Niagara	Oct 2016	Jan 2017	Apr 2017	Aug 2018	Jun 2019

Note: Event dates that have occurred as of September 2016 have been bolded.

option to not extend the term of the agreement for the two Niagara Falls casinos, which ends June 10, 2019. Under the current agreement, a non-renewal fee of about $170 million must be paid to the previous private-sector operator, Falls Management Company. The RFP for the Niagara gaming bundle is scheduled for release in March 2017. The non-renewal fee is not recoverable from Falls Management Company under any circumstance. The decision on whether to include the Windsor resort casino in modernization will be made at a later date.

Electronic Bingo Centres

In March 2012, OLG planned to transform bingo halls to electronic bingo centres that would allow patrons to play bingo, break-open tickets, raffles, lottery games and other new games electronically and on paper. Under the agreements OLG signed with participating bingo halls, the hall operator was to be responsible for the cost of site operations, including staffing, building improvements, furnishings and utilities, and had to operate in accordance with OLG policies and procedures. OLG would provide oversight of gaming products and operations. Net revenues were to be shared as follows: 25% to OLG, which planned to operate on a break-even basis; 25% to the charities holding the licence for the bingo hall; 3% to the host municipality that issued the licence; and 47% to the operator of the electronic bingo centre.

Bingo halls and charities with licences issued by municipalities could choose whether or not to participate. As of March 2014, 42 halls had expressed interest in converting to electronic bingo centres. However, OLG only had approved funding for converting 37 specific halls, of which 32 committed to the conversion. As of October 2015, OLG had converted the 32 bingo halls to electronic bingo centres but only 31 remained active, as one was closed in August 2015. OLG put additional conversions on hold in late 2015 as it lost $37 million in the 2014/15 fiscal year in its operation of electronic bingo centres, primarily due to lower revenues and higher than expected customer payouts. As of September 2016, OLG and other stakeholders were in discussions that could potentially reduce OLG's financial losses. The conversion of additional charitable gaming centres has been put on hold pending the outcome of discussions with the industry.

Internet Gaming

OLG's Internet gaming site, PlayOLG, was launched on January 8, 2015. PlayOLG allows Ontario players to buy lottery tickets and play popular casino games, such as slots, blackjack and roulette, online. In the 2015/16 fiscal year, OLG's Internet gaming business generated $15 million in profits. OLG also plans to launch a mobile casino app by March 2017. As of September 2016, the AGCO was testing the mobile casino games for certification. OLG said it expected the AGCO certification and Ministry of Finance approval for the mobile casino app would be obtained in early 2017.

Lottery Network

In March 2012, OLG planned to procure a private-sector service provider for its lottery network in December 2012, with private operations beginning in July 2013. The lottery business model, where private-sector service providers operate the lottery network while government retains control over how the lottery is conducted, added complexity to the transaction and led to delays. This model has not been implemented elsewhere in North America. In September 2014, an RFP for the lottery network was issued to the pre-qualified private-sector operators who had previous lottery operating experience in other countries.

In responding to the RFP, the pre-qualified private-sector operators indicated to OLG that they would not be able to commit to a level of business growth as required under the RFP. On September 23, 2016, OLG cancelled the RFP process for the lottery network in favour of a revised modernization

approach. The new lottery modernization approach is expected to retain OLG as the lottery operator with private-sector partnerships providing technological innovations that enhance provincial revenues. As of September 30, 2016, OLG believed that, despite cancellation of the RFP process, there is untapped revenue potential in the market and the new lottery modernization approach will provide increased revenues to the province.

Use of Fairness Monitor and Fairness Adviser

As part of the February 2012 cabinet approval, OLG was directed to engage a fairness monitor for procurement of private-sector operators for land-based gaming and the lottery network. In July 2013, OLG issued a Request for Services for a fairness monitor to oversee the modernization procurement process. A three-year contract was established in December 2013, with a maximum payment of $1 million in fees over three years. The contract for OLG's current fairness monitor expires on December 5, 2016. As of September 30, 2016, OLG was finalizing a new contract with the current fairness monitor for a two-and-a-half year term, with no option to renew.

In addition, at the request of the Chair of the OLG board of directors, OLG also engaged a fairness adviser in May 2012. The adviser, reporting directly to OLG's board, was to oversee the implementation of the Modernization Plan to ensure fairness and transparency, and address any conflict-of-interest issues. On October 10, 2014, OLG's fairness adviser submitted a letter advising that, based on the information he reviewed:

- no conflicts of interest of any consequence had arisen that would affect modernization; and
- OLG's procedures for identifying conflicts of interests served the purpose for which they were intended.

Hosting Fees for Gaming Facilities

The Municipality Contribution Agreement (MCA) OLG has signed with each of its 23 host municipalities remains clear, consistent and transparent. On January 25, 2016, Belleville became the latest host municipality to agree to the MCA. All host municipalities receive compensation based on the same formula:

- 5.25% on the first $65 million of slot revenue;
- 3.0% on the next $135 million of slot revenue;
- 2.5% on the next $300 million of slot revenue;
- 0.5% on slot revenue above $500 million; and
- 4.0% on table game revenue.

First Nations communities have separate agreements that have not changed under the Modernization Plan. In September 2016, OLG negotiated a new host agreement with Mississaugas of Scugog Island First Nation that is consistent with the standard MCA in place with other host municipalities.

Modernization Plan Revenue Projections and Assessments of Economic Impact

Projection: $4.624 Billion in Cumulative Net Profit to Province over Six Years

In March 2012, OLG publicly reported that the Modernization Plan would result in an additional $4.624 billion in net profit to the province (NPP) over a six-year period of transformation between April 1, 2012, and March 31, 2018. As **Figure 4** shows, this $4.624 billion was over and above the approximate $10.712 billion in NPP OLG forecast it would have generated anyway, without its Modernization Plan. OLG anticipated that, beginning in the 2017/18 fiscal year, it would continuously generate about $3 billion a year in profits (in the year ending March 31, 2018, this would consist of the $1.7 billion a year already being generated outside of modernization and $1.3 billion attributable to modernization).

As **Figure 4** shows, the additional NPP from modernization over the six-year period might be

Figure 4: OLG's 2012 Breakdown of Projected $4,624 Million Additional Net Profit to the Province (NPP) Over the Six Years of the Modernization Plan, Years Ending March 31 and Update to the Projections as of September 2016 ($ million)

Source of data: OLG

	March 2012 Projections of Additional Net Profit to the Province							September 2016	Change in NPP
	2013	2014	2015	2016	2017	2018	Total	Revised Projections	Projections
NPP Forecasted Without Modernization Plan Initiatives	1,776	1,853	1,869	1,738	1,738	1,738	**10,712**	**10,304**	**(408)**
Additional NPP Generated by Modernization Plan Initiatives									
Casino and slot operations and cancelling the Slots At Racetracks Program	–	347	431	547	659	731	**2,715**	**1,097**	**(1,618)**
Lottery operations	–	45	83	129	182	192	**631**	**0**	**(631)**
Existing business plans, including Internet gaming and charitable gaming	–	165	237	247	247	247	**1,143**	**257**	**(886)**
Internal efficiencies and cost savings (net of transition costs)	1	(206)	59	82	106	93	**135**	**153**	**18**
Total Additional NPP from Modernization Plan Initiatives	**1**	**351**	**810**	**1,005**	**1,194**	**1,263**	**4,624**	**1,507**	**(3,117)**
Total Expected NPP	**1,777**	**2,204**	**2,679**	**2,743**	**2,932**	**3,001**	**15,336**	**11,811***	**(3,525)**

* Over the six-year period, the NPP is only expected to increase by $1.1 billion (to $11.811 billion) from the $10.712 billion NPP forecasted without Modernization in March 2012.

overstated, as the total NPP for the period is only $1.1 billion more than the NPP forecast for the period without modernization in March 2012. The difference is due to OLG's reduced projections to the base NPP without modernization of $408 million. As of September 2016, OLG's full modernization benefits have been deferred to the 2021/22 fiscal year.

In addition, when accounting for $461 million of unanticipated transition and support funding to the horse-racing industry after cancellation of the Slots At Racetracks Program, the additional NPP to the province is only $639 million (14% of the original target $4.6 billion NPP) for the six-year period ending March 31, 2018.

Update to the NPP Projection—September 2016

As of March 2014, OLG had reduced those initial projections of NPP over the six year period (April 1, 2012 to March 31, 2018) to $2.4 billion. As of September 2016, projections for that period had been reduced to $1.5 billion in NPP (see **Figure 5**), over 65% lower than the original projection of $4.6 billion. The key factors in further reductions of $895 million over the last two years are:

- Delays in the procurement process of the gaming bundles and the lottery network by more than three years.
- Actual Internet gaming results for revenues and NPP that were much lower than originally anticipated and reduction of future projected annual NPP to $25 million from $100 million. OLG's 2012 financial projections for Internet gaming were overly optimistic and underestimated the influence of the grey market (illegal online gaming) on Ontario players.
- Based on the procurement results and contract negotiations for the East gaming bundle, NPP projections for other gaming bundles have been adjusted accordingly.

Figure 5: OLG Revisions to Projected Additional Net Profit to the Province (NPP) From Modernization Plan Initiatives ($ million) Over the Six-Year Period Ending March 31, 2018

Source of data: OLG

March 2012 Projected Additional NPP from Modernization Plan Initiatives Over Six Years	**4,624**
As of March 2013 update	
Less:	
• impact of delays	
• lowering of profit expectations from future gaming activities following revised forecasts of private-sector operator fees and gaming revenue growth	(540)
As of September 2013 update	
Less:	
• revising forecasts for return on private operators' capital investment and profit	
• loss of profits from not relocating various slots at racetracks to downtown city cores	
• higher-than-expected payments to municipalities as a result of new hosting fee agreements	
• impact of delays in implementing Internet gaming	
• impact of delays in procuring private-sector operators for gaming zones and lottery operations	
Plus:	
• $117 million saved by cancelling plan to terminate an existing resort casino operator's contract	
• $201 million upward adjustment from revised forecasts of lower costs and higher lottery revenues	(520)
As of December 2013 update	
Less:	
• loss of profits from absence of casino in GTA	
• decreased profits from existing lottery and gaming activities	
• impact of further delays in implementing Internet gaming	
• impact of further delays in procuring private-sector operators for gaming zones and lottery operations	(478)
As of February 2014 update	
Less:	
• decreased profits from existing lottery and gaming activities and additional costs to deliver electronic bingo	
• decreased profits from lottery network modernization	(684)
Revised Projected Additional NPP from Modernization Plan Initiatives—February 2014	**2,402**
As of September 2016 update	
Less:	
• impact of further delays in procuring a private-sector operator for gaming bundles and lottery network	
• decreased profits from Internet gaming	
• adjusted forecasts based on East gaming bundle procurement experience	(895)
Revised Projected Additional NPP from Modernization Plan Initiatives—September 2016	**1,507**
Difference—March 2012–September 2016	**3,117**

Long-Term Annual Modernization-Related Net Profit to the Province

As of September 2016, OLG now anticipates the full benefits of modernization to be realized in 2021/22, four years behind the March 2012 projection of the 2017/18 fiscal year. As outlined in **Figure 6**, OLG's new projection for full realization of modernization benefits is $889 million in additional NPP annually starting in 2021/22, a reduction of 30% from the $1.263 billion projection of March 2012. The annual modernization benefit of $889 million does not account for the $100 million of annual funding the province is providing to the horse-racing industry as a result of the Slots At Racetrack Program cancellation.

OLG recognizes that with modernization not yet fully implemented and with procurement complete for only one of the eight gaming bundles, there is still risk associated with the current projections. On September 23, 2016, OLG

Figure 6: Comparison of Projected Annual Long-Term Modernization-Related Net Profit to the Province (NPP), March 2012 Versus September 2016 ($ million)

Source of data: OLG

Modernization Initiatives	Final Modernization Related NPP to Be Realized in 2017/18 (as of March 2012)	Final Modernization Related NPP to Be Realized in 2021/22 (as of Sept 2016)	Increse (Decrease) in Expected NPP
Casino and slot operations and cancelling the Slots At Racetracks Program	731	508	(223)
Lottery operations*	192	209	17
Internet gaming	100	25	(75)
Existing business, internal efficiencies and cost savings (net of transition costs)	240	147	(93)
Total	**1,263**	**889**	**(374)**

* Lottery operations projected NPP of $209 million based on the previous lottery procurement model that has been cancelled. OLG still believes that $209 million in additional NPP is achievable but has not finalized the new lottery modernization approach that will help achieve the additional NPP.

cancelled the lottery network procurement model for privatization in favour of a new modernization approach based on partnerships between OLG and the private sector. As of September 30, 2016, OLG still believed that $209 million in additional NPP was achievable, but it had not finalized the new lottery modernization approach that would help achieve the additional NPP.

The Internet gaming projections of $25 million NPP annually might be overstated. As of September 30, 2016, Internet gaming revenues seemed to have stabilized and are projected to increase in 2016/17 to $53 million ($15 million NPP) from $49 million ($15 million NPP) in 2015/16. OLG expected the revenues to grow to $70 million by the 2019/20 fiscal year (32% projected growth over three years) through new games, natural growth and a mobile casino app. We question the optimism of these growth projections given the stabilized Internet gaming product.

Modernization Plan Projection: $475 Million to Charities from Electronic Bingo Initiatives over Eight Years

Our 2014 Special Report explained that, based on market trends, OLG would have trouble generating $475 million in profits to Ontario charities over the eight years from April 1, 2012, to March 31, 2020. OLG acknowledged that that initial projection from electronic bingo initiatives was overstated because:

- Bingo hall conversions took longer than expected, and NPP projections were based on lower customer payouts, which did not materialize.
- Break-open-ticket dispensers did not generate the projected $200 in revenues per unit per day from day one. It took more than three years for the break-open-ticket dispensers to produce $190 in revenues per unit per day.
- Original revenue projection was based on 2009 revenue data from bingo halls using paper. Since paper hall revenues have continued to decline, the revenue projection was likely overstated.

As of February 2016, Ontario charities have received an additional $71 million from charitable gaming centres, while OLG has sustained significantly higher financial losses over the same period. OLG now projects that charities will receive an additional $119 million over the next four years, for a total of about $190 million over eight years, 60% less than the $475 million projected in March 2012.

Modernization Plan Projection: Private-Sector Capital Investment in Gaming Industry of $3 Billion by the Year Ending March 31, 2018

OLG included in the Modernization Plan in March 2012 the projection that Ontario would see an additional $3 billion in new private-sector capital investment in the province by March 31, 2018. In April 2014, based on the resolutions passed by various municipal councils and OLG's decision to not sell the three resort casinos in Windsor and Niagara Falls, the original private-sector capital investment projections were reduced from $3 billion to $938 million. Of this $938 million, a projected 71% was to be collected by the Ontario government as proceeds from the sale of OLG's existing assets.

As of September 2016, OLG estimates modernization will generate around $1.5 billion in private-sector capital investments in the gaming industry, an increase of $562 million (or 60%) from the April 2014 projections. Most of this increase was attributed to the planned gaming and non-gaming expansion at Woodbine Racetrack. The estimated $1.5 billion investments include $1 billion (up from $272 million in April 2014) in new capital investments and $500 million ($666 million in April 2014) for the purchase of existing assets.

Included in the capital projection is $100 million in new capital investments expected from the East gaming bundle operator. The projection does not include the recently announced modernization of the Niagara Falls casinos.

Modernization Plan Economic Forecast: 2,300 Net New Lottery and Gaming Industry Jobs by March 31, 2018

In March 2012, OLG publicly projected that when the lottery network and gaming facilities were privately operated, net new full-time-equivalent lottery and gaming jobs would increase by 2,300 over 2011 levels. However, OLG did not publicly disclose that this depended on a GTA casino creating 3,300 new jobs, while 1,000 other gaming industry jobs would be lost in the rest of the province. As of March 31, 2014, OLG had not updated its job projections, despite the fact that the March 2012 projections were outdated due to changes to the Modernization Plan, especially the cancellation of a GTA casino.

As of September 30, 2016, OLG estimated that when modernization was fully complete by the 2021/22 fiscal year, there would be approximately 1,700 additional jobs in the gaming industry. As shown in **Figure 7**, the job gain projection is primarily based on the potential expansion of gaming at Woodbine and new sites in the East gaming bundle.

In March 2012, OLG estimated that the Modernization Plan would also result in 4,000 new jobs at hotels, restaurants and entertainment centres, and in retail stores in communities hosting new gaming sites. As of September 30, 2016, OLG had retracted those claims and said that the creation of service sector jobs would depend on private operators' plans for non-gaming amenities in each gaming bundle. OLG projects the largest cluster of service jobs would be in Toronto should gaming be expanded at Woodbine.

Figure 7: Breakdown of Job Gains and Losses by Key Modernization Initiatives as of September 30, 2016
Source of data: OLG

Source or Location	Net Job Gains/(Losses) by March 2021/22
Closing three slot facilities at racetracks[1]	(505)
Niagara casinos' efficiencies[1]	(250)
Windsor casino efficiencies[1]	(287)
East gaming bundle (new sites)	343
GTA gaming bundle (includes Woodbine expansion)	2,285
Lottery operations[2]	150
Total	**1,736**

1. Job losses have already occurred.
2. On September 23, 2016, OLG revised its lottery modernization approach but the job estimates for lottery operations have not yet been updated.

Mental Health and Addiction Matters

The Ontario government commits 2% of annual slot revenue from OLG casinos and racetracks to preventing problem gambling and help for people with gambling problems. In the 2015/16 fiscal year, the government spent $52 million on problem gambling prevention and mitigation initiatives. Of that, OLG spent about $16 million on its own responsible gambling initiatives and the remaining $36 million went to the Ministry of Health and Long-Term Care for research into and prevention and treatment of problem gambling.

As of September 2016, OLG was standardizing its responsible gambling (RG) program across four lines of business (lottery, slots and casinos, Internet gaming and charitable gaming) to deliver a comprehensive program that meets the new AGCO standards, as well as third-party accreditation programs.

Responsible Gambling Check Accreditation

The Responsible Gambling Council (RGC) is an Ontario-based, independent, not-for-profit organization established more than 30 years ago that is dedicated to preventing problem gambling. RGC offers an accreditation program, RG (Responsible Gambling) Check, which awards points to gambling facilities for meeting standards in a number of areas, including corporate policies, self-exclusion options for patrons, advertising and promotion; patron access to money and credit; venue and gaming features; informed customer decision-making; assistance to patrons who may have gambling problems; and employee training. As of March 31, 2014, all 19 OLG gaming sites were accredited by RG Check.

As of September 2016, all OLG gaming sites are in the RG Check re-accreditation process, which is required every three years. The process takes around five months per site and is expected to be completed by March 2017.

In February 2016, OLG's online gaming site, PlayOLG, also received RG Check accreditation.

Internet Gaming—PlayOLG

To ensure OLG considered the impact on communities of mental health and/or addiction matters, and that OLG met its regulatory and third-party RG standards, OLG conducted a review and consultation process from January 2011 to October 2014. Three key RG stakeholders provided input to RG policy development: Centre for Addiction and Mental Health (CAMH), Ontario Problem Gambling Research Centre (now Gambling Research Exchange Ontario) and the Responsible Gambling Council.

To meet regulatory and third-party RG standards, the gaming site, PlayOLG, was launched with tools integrated into the playing experience to help enable patrons to make safe decisions regarding their gambling behaviour. In November 2014, before launching PlayOLG, OLG trained the staff at the site's support centre to identify red-flag behaviours and respond to players. As of September 2016, support centre staff had identified 16 red-flag behaviours in 2015 and that number had increased to 26 in the first eight months of 2016.

As of September 2016, CAMH was studying the impact of the legalization of online gambling in Ontario. It expected to release the results in winter 2017.

Prevention of Problem Gambling

In the April 2014 Special Report, we noted that OLG did not meet several key requirements consistently at its gaming facilities, but it met enough to be accredited for RG Check. For example, OLG's gaming facilities did not meet the requirement that ATMs be placed outside the gaming floor to encourage a break in play by patrons who use them. As well, OLG's new slot machines had not been screened from a responsible-gambling perspective by an external expert.

In August 2013, OLG engaged Strategic Science, an independent consulting group with expertise in gambling research, to review all academic, health

and industry literature addressing questions of gambling behaviour and ATMs. In May 2014, the review found that removing ATMs from the gaming floor was not a long-term solution, since gamblers tended to adapt to the relocation of cash sources. The report also noted that withdrawal limits and RG messaging on ATMs were stronger prevention measures. As of September 2016, OLG had only accepted the ATM messaging suggestion and did not plan to implement withdrawal limits on ATMs or remove them from the gaming floor.

In February 2016, a pilot project of new RG messages displayed on ATMs was introduced at OLG Slots at Woodbine Racetrack. Based on the results of the pilot, ATM messaging was to be rolled out at all OLG sites in fall 2016/winter 2017.

Reinstatement of Self-Excluded Individuals

In the April 2014 Special Report, we noted that RG Check accreditors had found no evidence that OLG offered counselling to patrons who had previously self-excluded themselves from play at casinos and who requested reinstatement. To improve the reinstatement process, OLG collaborated with CAMH to develop a tutorial for self-excluders who wish to return to gambling. The tutorial also links patrons to additional resources. It was implemented for online gambling in July 2015 and at gaming sites at the end of March 2016. The tutorial is mandatory for anyone to be eligible for reinstatement. The effectiveness of the Self-Exclusion Reinstatement Tutorial is being evaluated by OLG; the evaluation is to be completed by March 2017.

Responsible Gaming at Electronic Bingo Halls

By December 2015, OLG and the RGC had installed self-serve Responsible Gaming Resource Centres (RGRCs) at all 31 electronic bingo halls. RGRCs are on-site, stand-alone facilities that offer RG information through multiple formats, such as brochures, videos, posters, digital signage and interactive kiosks. RGC staff conduct special education events and regular sites visits three times a year. By September 2015, employees at all 31 electronic bingo halls had been trained by CAMH on how to respond to players showing red-flag behavioural signs.

Responsible Gambling in the Horse-Racing Sector

The March 2012 Modernization Plan cancelled the Slots At Racetracks Program, ending OLG's relationship with the horse-racing industry. On October 11, 2013, the Ontario government released a five-year plan for a sustainable horse-racing industry that proposed that OLG integrate horse racing in its Modernization Plan, including applying its responsible gaming (RG) expertise to the industry.

In his January 2015 mandate letter, the Minister of Finance instructed OLG to "[assist] the industry with implementing a responsible gambling strategy" for the horse-racing industry. OLG began consulting with the industry and it worked with an external consultant. A needs assessment report in March 2016 identified current practices and feasible opportunities to enhance RG at race tracks. Industry comments on the needs assessment report were solicited in May 2016 and July 2016. As of September 2016, OLG was expected to finalize its advice based on these consultations by December 31, 2016.

Cancellation of the Slots At Racetracks Program and Impact on Horse-Racing Industry

In the April 2014 Special Report, we concluded that the province and OLG were fully aware that the decision to cancel the Slots At Racetracks Program, which provided $345 million in annual funding to racetrack operators and horse people, would have a significant negative impact on the horse-racing industry and force it to be downsized to levels sustained solely by the betting revenues its generates. The cancellation of the Slots At Racetracks Program, which provided 20% of slot revenues at

racetracks to the horse-racing industry, led to a significant reduction in races and job losses to the industry.

After the Slots At Racetracks Program was cancelled, the Ministry of Agriculture and Food provided transition funding of about $61 million to the horse-racing industry for the year ending March 31, 2014. In October 2013, the Ontario government released a five-year plan for the horse-racing industry. Under this plan, up to $400 million would be provided to the industry over five years, and horse racing would be integrated with the Modernization Plan. Integration with the Modernization Plan included OLG conducting research into potential horse-themed lottery products and bringing OLG's business, marketing and responsible-gaming expertise to bear on the horse-racing industry. On March 31, 2014, the government announced that up to $500 million, instead of the $400 million previously announced, would be provided to the industry over five years ending March 31, 2019. In February 2016, as part of the 2016 Budget, the horse-racing funding was extended by two years to March 31, 2021.

In his January 2015 mandate letter, the Minister of Finance instructed OLG to "create a new line of business within the organization that is focused on horse racing integration activities." The line of business was to be responsible for taking over administration of government funding to racetracks under the Horse Racing Partnership Funding Program (HRPFP) and oversight of provincial tax relief for the industry under the pari-mutuel (horse-race wagering) tax reduction. In the 2015/16 fiscal year, the HRPFP and the pari-mutuel tax reduction provided around $160 million in funding to the horse-racing industry.

In September 2015, a senior vice-president was hired to lead OLG's new horse-racing division—Ontario Racing. The division is focused on three key areas:

- creating a new line of business to guide horse-racing integration activities, including contract management, marketing and shared services support;
- creating the tools and processes to execute the administration of funding for the horse-racing industry; and
- creating effective stakeholder relationships to support the needs of the horse-racing industry through extensive meetings with racetracks and other key industry stakeholders from October 2015 to March 2016.

In April 2016, OLG assumed responsibility for administering the HRPFP funding to the horse-racing industry and oversight of provincial tax relief for the industry under the pari-mutuel tax reduction.

As part of the January 2015 letter, the Minister of Finance also requested that OLG maintain slot machines and other gaming operations at most racetracks. As of September 2016, OLG had executed leases for all 14 gaming sites located at racetracks.

Performance Measures

As of September 2016, OLG has taken the following steps toward developing horse-racing performance metrics:

- established an Ontario horse-racing industry working group called Performance Management Excellence Group with representation from the Ontario Ministry of Agriculture, Food and Rural Affairs, Ontario Racing, the Ministry of Finance and the Alcohol and Gaming Commission of Ontario;
- developed an Ontario horse-racing industry integrated performance management system; and
- selected a list of key performance indicators to gauge the health of the Ontario horse-racing industry and measure its sustainability.

The list of key performance indicators was to be discussed with the racetracks by the end of October 2016. OLG was in the process of collecting data for the selected indicators and planned to have a draft performance report card in place by June 2017.

Horse-Themed OLG Products

OLG began working with the horse-racing industry on new products in September 2014. OLG decided to move forward with two product ideas that did not generate incremental revenue, but provided benefits to the industry in the form of increased awareness. The first product was an online horse-themed slot game through PlayOLG, called "Fire Horse." The second product was a new $5 instant scratch ticket themed around the Canadian Triple Crown. Neither of these products had direct financial impact on the horse-racing industry.

Ontario Racing Marketing Campaign

Starting in 2016/17, as part of the integration strategy, OLG plans to spend $10 million annually on horse racing, including around $5.6 million on marketing and research for the horse-racing industry. OLG hired an advertising agency to work on the horse-racing sector. To date, a new logo and brand for the new industry association, Ontario Racing, has been created and a full paid media campaign (television, cinema, digital, social media and print) was in effect from May 2016 to September 2016.

The same advertising agency was also engaged by OLG to develop a co-branding strategy with Ontario Racing. This campaign launched in June and runs through March 2017. The new OLG.ca website will serve as the main digital medium and will feature key messaging on horse racing, as well as a series of mini-documentaries highlighting various horse people and their contributions to the sport.

Long-Term Funding Model for the Horse-Racing Industry

As part of the February 2016 provincial budget, the government announced a two-year extension to the transfer payment program from March 2019 to March 2021. Beyond this time, OLG is expected to establish a future, longer-term funding arrangement with the industry.

In October 2016, Ontario Racing presented a draft 17-year funding plan to industry stakeholders. The funding, totalling up to $1.6 billion, is projected to begin after the current $700 million funding ends in March 2021, to give the industry $93.4 million annually. Ontario Racing is planning to consult with industry stakeholders on the draft plan, with the goal of having a draft agreement by March 2017 to be submitted for government approval.

Ministry of Health and Long-Term Care

Ornge Air Ambulance and Related Services

Follow-Up on *March 2012 Special Report*

RECOMMENDATION STATUS OVERVIEW					
	# of	Status of Actions Recommended			
	Actions Recommended	Fully Implemented	In Process of Being Implemented	Little or No Progress	Will Not Be Implemented
Recommendation 1	3	3			
Recommendation 2	4			4	
Recommendation 3	5	3	2		
Recommendation 4	2	1			1
Recommendation 5	4	4			
Total	**18**	**11**	**2**	**4**	**1**
%	**100**	**61**	**11**	**22**	**6**

Background

Under the *Ambulance Act* (Act), the Minister of Health and Long-Term Care is required to ensure the "existence throughout Ontario of a balanced and integrated system of ambulance services and communication services used in dispatching ambulances." In addition, the "Minister has the duty and the power to fund and ensure the provision of air ambulance services." In 2005, the Ministry of Health and Long-Term Care (Ministry) signed a performance agreement with Ornge, a not-for-profit corporation, to become responsible for all air ambulance operations. Through contractual agreements with the Ministry, Ornge was charged with providing Ontarians with both air ambulance services and critical-care land ambulance services, consisting of transferring critically ill patients between health care facilities.

Ornge and its associated companies currently employ more than 600 people, including paramedics, pilots and aviation specialists. Ornge owns and operates a fleet of aircraft and land ambulances stationed at 12 bases across Ontario. It also contracts with independent service providers throughout the province to provide air transportation services to patients and operates a dedicated paediatric transport vehicle out of the Greater Toronto Area.

In the 2015/16 fiscal year, Ornge received $172 million in Ministry funding and was responsible for more than 18,000 patient-related transports, including patients, medical teams and organs for transplant. More than 90% of these were "inter-facility" transfers of patients between health-care facilities. In our 2012 Special Report, we found that the Ministry's accountability agreement with Ornge had hindered its ability to obtain the information it needed to exercise adequate oversight. Examples of areas where the Ministry had not received adequate information to ensure proper oversight and which would have warranted follow-up included:

- The Ministry did not periodically obtain information on the number of patients being transferred or assess the reasonableness of the cost of the services being provided on a per-patient basis.
- Ornge management, with approval of its board, created a network of for-profit and not-for-profit subsidiaries and other companies with which Ornge entered into complex financial arrangements to deliver air ambulance services.
- Ornge's corporate head office was purchased for $15 million in 2011 using funds borrowed through a bond issue, and Ornge subsequently entered into a complex arrangement with some of the other entities it created to sell the building and lease it back to itself at an above-market rate so that it could secure $24 million in financing. This transaction enabled Ornge to extract approximately $9 million by entering into a mortgage bond—based on the value of the property—with a third-party financial services company.
- There was a lack of transparency surrounding the compensation of many senior management staff and board members.
- Ornge's dispatch system did not automatically record the times of key events in the dispatch and patient transfer process, such as the time a call is received.
- The Ministry received limited information on whether requests for patient pick-up and transfer were being responded to in a timely and appropriate manner or whether patients received the appropriate level of care during transport.

As a result of our 2012 audit, a number of significant changes have been made to strengthen the Ministry's oversight processes of Ornge, simplify Ornge's corporate structure, and refocus the organization on its core mandate of providing Ontarians with air and land ambulance transport. These changes include the establishment of a new Ornge board of directors; replacement of Ornge's Chief Executive Officer and other senior management; revisions to the Ministry's performance agreement with Ornge that increased the Ministry's oversight authority by, for example, increasing the Ministry's audit and inspection powers, and requiring Ministry approval of key strategic and operating decisions before Ornge undertakes them; and increasing Ornge's reporting obligations to keep the Ministry well informed of Ornge's activities.

Standing Committee on Public Accounts

The Standing Committee on Public Accounts (Committee) held hearings on this audit in 2012, 2013 and 2014. In June 2013, the Committee tabled an interim report in the Legislature describing issues and observations identified during the 2012 hearings and in October 2014 a second report was tabled, which provided an overview of the many subject areas touched upon throughout the hearings in 2013 and 2014. The Committee's 2014 report identified more than 60 areas of concern about Ornge's operations and the Ministry's oversight, but did not issue any formal recommendations. For a summary of the Committee's concerns and our assessment of whether they have been addressed, see **Chapter 3, Section 3.05** in this

Volume 2 of our Annual Report. The Committee's report concluded that the matters identified in our 2012 report could be attributed primarily to the absence of due diligence and oversight on the part of the Ministry in applying a robust accountability framework; the lack of transparency and accountability on the part of Ornge's management and board of directors, compounded by systemic operational issues; and shortcomings in Ornge's first performance agreement.

Status of Actions Taken on Recommendations

Since our 2012 audit, the Ministry has revised Ornge's performance agreement to better establish its oversight expectations, increase Ministry powers consistent with government agency agreements, and provide for more frequent reporting to enable better oversight. The Ministry has established new performance measures, such as a 15-minute target from the time of pilot acceptance of a call to the time air traffic control clearance is requested (for emergency and urgent calls) for all Ornge aircraft. The Ministry has also revised existing performance measures to increase the timeliness with which Ornge must take corrective action. For example, when Ornge has not ensured that medical staff are qualified to provide patient care they must cease using their services and establish a plan to rectify the situation within seven days (formerly it was thirty days). The Ministry has also increased Ornge's reporting obligations. Ornge is now required to provide better information on both its financial and operational performance. For example, the performance agreement requires Ornge to report regularly to the Ministry on call volumes, number of requests for service, percentage of requests serviced, reasons why calls were not serviced, and number of patients transported.

Ornge has taken steps to streamline and simplify its organizational structure by reducing the number of total entities from nineteen to seven, with further plans for amalgamation on-going. In addition, Ornge has implemented a new computer-aided dispatch system that provides it with real-time information on the position of its air and land ambulances. This gives Ornge the ability to track and record all aircraft flight distances automatically via satellite and calculate patient distance travelled for both patient and non-patient legs of transport. It also allows for better tracking of the reason for and use of medical escorts, who may accompany patients when Ornge cannot provide the level of care required. Ornge has also investigated the reasons that a significant number of calls are cancelled after take-off. It is in the process of reducing these occurrences by working with municipal emergency medical services and central ambulance communication centres, which are responsible for directing the movement of provincial land ambulances and emergency response vehicles within set geographic areas, to more clearly define the criteria for requesting air ambulance services. According to Ornge, this process should further decrease the number of cancelled calls within these set geographic areas.

However, the Ministry has made little progress in assessing the total demand for critical-care land ambulance services, determining the optimal number of critical-care land ambulances that Ornge requires and determining the cost of different models for providing critical-care land ambulance services in Ontario. The Ministry also indicated that it would not be implementing our recommendation of expanding the service agreement's performance requirements to measure response times from the time a call is initially received to when Ornge arrives on site, and to when the patient reaches his or her destination.

The status of actions taken on each of our recommendations is described in the following sections.

Ornge's Performance Agreement With The Ministry

Recommendation 1

To ensure that the amount paid for air ambulance and related services is reasonable for the level of service provided, the Ministry of Health and Long-Term Care should:

- *consider renegotiating Ornge's performance agreement to provide it with direct access to affiliated organizations with which Ornge has directly or indirectly entered into contracts, or develop an alternative mechanism to ensure that the public's interest in Ontario's air ambulance service is being protected;*

  Status: Fully implemented.

Details

The Ministry of Health and Long-Term Care (Ministry) signed a revised performance agreement with Ornge on March 19, 2012, and a further amended agreement on August 13, 2015. Significant revisions were made to the agreement to address concerns raised in our 2012 Special Report, including explicitly outlining actions that require Ministry approval: purchasing or leasing real property (land or buildings); borrowing money or incurring debt outside of routine business transactions; selling, leasing, mortgaging or disposing of assets; and entering into agreements with affiliated companies. The performance agreement allows the Ministry to perform unannounced inspections of Ornge regarding its obligations under the agreement and the use of Ministry funding. Ornge is also obligated under the agreement to provide over 50 reports to the Ministry at various intervals throughout the year covering aspects of its operations, finances and business activities.

In July 2012, the Ministry also established an air ambulance oversight unit to directly oversee Ornge's compliance with the revised performance agreement. The Ministry is currently undertaking a review of the current governance model regarding how it oversees Ornge and conducting risk assessments to ensure that on-going oversight of Ornge is appropriate. One thing it is looking at, for example, is whether the current, rigorous oversight model is necessary or whether some of the levels of approval can be discontinued. A joint Ministry-Ornge risk assessment working group was established in May 2016 to facilitate this process.

To address concerns over corporate restructuring, a key change to the revised performance agreement requires Ornge to obtain Ministry approval prior to altering its corporate structure. Whereas previous Ornge leadership created nineteen for-profit and not-for-profit entities, the new leadership team and volunteer board of directors (which assumed control in January 2012) have worked to streamline Ornge's corporate structure, which now consists of seven entities. Entities such as J Smarts (part of Ornge's charitable foundation) have been dissolved, and Ornge, with the consent of the Ministry, has further amalgamated various subsidiaries within its control. For example, Ornge Corporate Services Inc., Ornge Global Real Estate Inc. and Ornge Real Estate Inc. became a single entity in October 2016. Certain for-profit entities with which Ornge is no longer affiliated, such as Ornge Global Holdings LP, Ornge Global GP Inc. and Ornge Global Solutions Inc., went bankrupt in 2012, because of money owed to Ornge Global Real Estate Inc. and other private-sector companies. The Ministry has decided to let these entities shut down in due course as the appropriate tax bodies take action when they do not remit their required annual tax returns. Under Ornge's current structure, it receives funding from the Ministry and may only direct it to entities that deliver core air ambulance and related services, such as Ornge Global Air Inc., which employs Ornge's fixed wing aviation employees. Each of the Ornge-controlled entities is also consolidated in Ornge's financial statements, which are provided to the Ministry. This minimizes the risk of funds being directed outside of the organization.

To further protect the public's interest in air ambulance services, changes have been made to the *Ambulance Act* to legally strengthen the Ministry's

oversight, similar to its powers over public hospitals. For example, amendments effective July 1, 2015, give the government authority to appoint special investigators or a supervisor when it is in the public interest to do so; appoint members to Ornge's board of directors; issue binding ministerial directives; prescribe terms of the performance agreement in regulations; and provide whistleblower protection for staff members.

The revised performance agreement also requires Ornge to comply with the *Broader Public Sector Executive Compensation Act, 2014*; the *Broader Public Sector Accountability Act, 2010*; and the Broader Public Sector Expenses Directive issued by the Management Board of Cabinet, which requires Ornge to establish expense reimbursement rules applicable to board members, employees, consultants and contractors engaged by the organization, and post them publicly on its website.

- *determine whether the amount it pays Ornge is reasonable by, for example, obtaining and evaluating information on the cost and delivery of air ambulance and related services compared to previous years and to costs incurred by other operators in Ontario and other jurisdictions; and*

  Status: Fully implemented.

Details

In February 2013, the Ministry completed a literature review and inter-jurisdictional scan of air ambulance services and produced a comparative summary document. The Ministry found that none of the other jurisdictions it looked at were comparable to Ontario in terms of the range of services provided or type of geography that is serviced by Ornge. The Ministry also found that comparable program-cost information for air ambulance services in other jurisdictions was not readily available to the public, and therefore a reliable cost comparison was not feasible. The Ministry informed us that it did not contact other jurisdictions that provide air ambulance services because Ornge provides a more diverse range of such services than any other jurisdiction, and therefore comparisons could not readily be made. As per the terms of the requirements of the revised performance agreement, the Ministry instituted a zero-based budget methodology for the 2013/14 fiscal year, which has been in place since. The annual zero-based budget (which requires that all expenses are justified for each period instead of providing justification only for changes from a previous period) that Ornge presents to the Ministry outlines its budgeted expenses in individual areas such as air ambulance, base hospitals and organ recovery, and provides justification for all expenses by function for each funding year. The Ministry receives quarterly financial reports and holds meetings with Ornge every other month to discuss its financial position. The Ministry is thereby able to oversee actual spending compared to what is forecast. In addition, the Ministry completes an annual performance and trend analysis that provides a year-over-year cost comparison of the air ambulance program.

- *establish, in consultation with Ornge, additional measurable performance indicators for air and land ambulance services, and obtain more frequent and informative reports on the extent to which these performance expectations are being met.*

  Status: Fully implemented.

Details

The revised performance agreement increased Ornge's mandatory reporting requirements. The previous agreement required annual reporting of performance indicators, an operating budget, financial statements and quarterly expense reports. The revised performance agreement still requires those reports but has also increased Ornge's reporting obligations to include a minimum of 52 reports to be provided to the Ministry throughout the course of the year. The mandatory reports are grouped into categories of operations; finances; business, labour, legal; and stakeholders. Most reports in the

operations category are required monthly including 13 reports providing the Ministry with information on call volumes, number of requests for service, percentage of requests serviced, reasons why calls were not serviced, number of patients transported, appropriate level of care provided, response times, aircraft availability, average cost of services per patient and the percentage of calls requiring medical escorts. The financial category contains ten reports, most of which are provided annually to the Ministry, including an operating budget, operational plan, in-year expenses and annual expenses.

In addition, new performance indicators have also been introduced, requiring Ornge to comply with time targets, such as requesting air traffic control clearance within 15 minutes (if already fuelled) or 25 minutes (if not already fuelled) of a pilot's acceptance of the call for all dedicated aircraft emergency and urgent calls. The revised performance agreement further explicitly states that Ornge's success or failure in meeting these performance indicators is a factor in establishing its annual funding. The Ministry also receives a daily update from Ornge providing a summary of call volumes, including reasons for calls not serviced and service delays.

Land Ambulance Services

Recommendation 2

Given that Ornge has been transporting critically ill patients between health-care facilities for more than three years, the Ministry of Health and Long-Term Care should conduct a formal program evaluation, including:

- *assessing the current total demand for critical-care land ambulance transports in Ontario and whether the program is meeting the needs of the facilities that patients are being transferred between;*

Status: Little or no progress.

Details

In March 2013, the Ministry hired a consulting firm to complete a program review evaluating the Critical Care Land Ambulance (CCLA) program's ability to address our 2012 Special Report recommendations and whether it was achieving Ornge's intended program outcomes of providing coordinated, fast and safe transport of critically ill patients; relieving pressure on land ambulance services; reducing the need for hospital escort staff for critical-care patient transfers; and reducing reliance on air transportation. The final report was provided to the Ministry in August 2013. It concluded the CCLA program has filled an essential need for critical care inter-facility land transports; the CCLA program provided safe transport for both patients and paramedics conducting the transports but there were opportunities to further enhance patient and staff safety; the program was sufficiently resourced to take on greater transport volumes; and the program has saved hospitals $3.2 million since inception in medical-escort costs for CCLA transports. The consultant was unable to definitively conclude on the current total demand for transports due to a lack of data necessary to categorize whether patients requiring critical care were more appropriately transported by land or air. As a result, the consultant's report was only able to state that potential demand was between 16,000 to 31,000 transports annually.

In September 2013, a group of representatives from the Ministry and Ornge, as well as external health partners including the Ontario Hospital Association and Local Health Integration Networks (LHINs), came together to address the integration of inter-facility medical transportation across Ontario as part of the Enhancing Emergency Services in Ontario initiative. They concluded work in February 2014 with the Ministry recognizing a need for further integration amongst all health-care delivery partners to better serve patients and improve the quality of patient care while controlling costs. As a result, the Ministry is undertaking a multi-year strategic reform of emergency health

care services, called "Enhancing Emergency Services in Ontario 2.0," to improve and sustain the quality of coordinated care across the patient's journey. The Ministry advised us that determinations about the future state of the CCLA program might be considered as this work progresses. The Ministry is considering whether to assess CCLA demand as part of this new initiative, which is to commence in the next several years.

- *since the number of transfers has been significantly less than expected, determining the optimal number of land ambulances Ornge requires;*
  Status: Little or no progress.

Details

The August 2013 consultant's report on CCLA services estimated the time each ambulance spent on calls and other required activities, such as the return trip to base, and multiplied this by the number of transports to determine the total "time on task." It compared this with the total vehicle availability at each base and determined that each vehicle spent less than a third of its time on required activities. The consultant found that each base therefore required only one vehicle, and recommended that each base also have one backup vehicle. The consultant's report on CCLA services concluded that, "considering the current number of bases, the current complement of eight vehicles is assessed to be the minimal number of ambulances required to perform current volumes and support operations safely." However, the report did not assess whether CCLA services could be administered through a different service model throughout the province, which is information that would be necessary to determine the optimal number of ambulances needed.

- *determining the capacity for municipal land ambulances—including those of Toronto Emergency Medical Services, which currently responds to most calls—to transport these patients instead of Ornge doing so; and*
  Status: Little or no progress.

Details

The August 2013 consultant's report concluded, based on discussions with four municipalities, that there was limited capacity at the municipal level, except in Toronto and Ottawa, to conduct CCLA transports given that not all municipalities had critical care paramedics on staff and did not have the mandate and/or funding to perform CCLA transports. It further noted that while Ottawa had the critical care paramedic resources available, it did not have the mandate or the funding to assume those types of transports. The Ministry has not otherwise assessed the capacity of land ambulance services in the province to provide critical care transports directly.

- *comparing the costs of different service options to help determine whether patients can be safely transported more cost effectively than under the current model.*
  Status: Little or no progress.

Details

The August 2013 consultant's report included a high-level analysis that examined the feasibility of four different models for optimizing the efficiency of critically ill patient transport in Ontario. The pros and cons of each model were assessed, including a qualitative discussion on cost impacts. The report put forth the following models: 1) all CCLA services assumed by Ornge; 2) centralized management/dispatch/medical oversight (centralized either at Ornge or another entity); 3) hospital-based teams and local emergency medical services dedicated to critical-care transport, dispatched centrally by Ornge or another entity; and 4) CCLA emergency medical services managed and delivered by municipalities. The report recommended that the models should be further explored before determining a course of action.

Dispatch Of Ambulances

Recommendation 3

To help ensure that air ambulance and related services meets patients' needs cost-effectively, Ornge should:

- *ensure that its new dispatch system reliably tracks flight distances and cost data so that the most appropriate aircraft can be efficiently routed to pick up and deliver patients requiring transport;*
  Status: Fully implemented.

Details

On June 1, 2015, Ornge implemented a new computer-aided dispatch system for its air ambulances and critical care land ambulances. The new dispatch system provides Ornge with the real-time current position of its aircraft; time information on engine start, take-off and landing; course and altitude information; real-time current position of Ornge's land ambulances; and estimated arrival times at facilities based on real-time traffic conditions. The dispatch system uses a flight-planning platform to track all aircraft flight distances based on origin and destination information inputted into the system by Ornge staff once a transport has been accepted. During transport, the system records aircraft position via satellite tracking. Upon call completion all tracking data is automatically transferred into the dispatch system, which calculates the distance the patient travelled and the distance travelled for each leg of the journey, and segregates information for both patient and non-patient legs of the journey.

For non-urgent and scheduled transfers, which are typically performed by standing agreement carriers, cost is always to be considered. Ornge uses its Long-Term Planning (LTP) optimization tool, which generates the most cost-effective routes for all next-day non-urgent patient transfers based on the negotiated rates for standing agreement carriers that have been programmed into the LTP tool. Ornge monitors overall flight costs through a monthly financial report on flight hours, fuel costs and other costs, such as landing fees. This monthly report is reviewed and analyzed by Ornge's finance department and senior management to ensure costs are in line with expectations.

Ornge informed us that, in accordance with its policies, cost is not used as a basis for selecting an aircraft for on-scene calls and emergency transfers within its dispatch system. For example, for transfers involving threats to life or limb or imminent risk of deterioration if an immediate transfer is not conducted, the fastest, most appropriate ambulance is selected without consideration of costs. Ornge uses a number of tools to improve the consistency of its dispatch decision-making process, including an algorithm to address ambulance selection and a "search closest ambulance" feature that ranks ambulances by time and distance parameters. In October 2016, Ornge introduced a new requirement that its dispatch staff use this tool for urgent and emergency transfers. For urgent transfers, that is patients with conditions that could become serious enough to require an emergency intervention, Ornge's transport medicine physicians can exercise judgment on whether a less costly flight can be used as an alternative. Ornge's policies explicitly state that if two or more ambulances are available and meet the patient's needs and would take the same time to provide care, Ornge staff should assign the most cost-efficient ambulance.

- *work with the Ministry of Health and Long-Term Care (Ministry) to electronically link its dispatch system to the land ambulance dispatch systems run by the Ministry and municipalities;*
  Status: In the process of being implemented by March 2018.

Details

Preliminary integration efforts are underway between Ornge and the Ministry to integrate Ornge's dispatch system with the 22 central ambulance communications centres (CACCs) that are responsible for directing the movement of all provincial

land ambulances and emergency response vehicles within given geographic areas. The Ministry has drafted a technical specifications document for this project. Ornge is part of the joint project team on systems development and implementation activities. A project kick-off meeting was held in July 2016 with members of both the Ministry and Ornge to outline the scope, timelines and governance structure of the project. The Ministry expects that initial deployment will take place at one CACC by March 2017, with future deployment at the remaining CACCs to be completed by March 2018.

- *track and analyze how often hospital staff must accompany a patient because appropriately trained Ornge paramedics are not available, and determine if there are any systemic issues, such as not enough paramedics being available at a particular base, that need to be addressed; and*

  Status: Fully implemented.

Details

At the time of our 2012 audit, Ornge did not consistently have sufficient staff to provide medical escorts at the required level of care. Ornge addressed this in 2014 by both partnering with Cambrian College to provide an advanced-care paramedic training program and by providing internal training to upgrade the qualifications of their existing paramedic staff. Through this renewed focus on paramedic training, nine paramedics in 2014 and 16 paramedics in 2015 progressed from primary-care to advanced-care paramedic (flight) certification and 13 paramedics in 2014 and six in 2015 progressed from advanced-care paramedic (flight) to critical-care paramedic certification. This was an improvement over 2013, when only five paramedics obtained upgraded certifications.

With implementation of its new dispatch system in June 2015, Ornge is able to track the number of transports for which a hospital medical escort was required because it could not provide an escort at the required level of care. Data for the period from January 1, 2016 to March 31, 2016, indicated that less than 1% of serviced calls required a hospital medical escort due to Ornge's inability to provide the required level of care.

However, the full implementation of this recommendation does not indicate that Ornge was always able to provide the required level of care for all calls, and in some cases medical escorts were required.

- *review the reasons why a significant number of flights are cancelled after takeoff and take action to reduce such occurrences.*

  Status: In the process of being implemented by March 2018.

Details

High rates of cancelled calls most commonly result from requests for an on-scene helicopter, and are variable across central ambulance communication centres (CACCs) and municipal emergency medical services. On a monthly basis, Ornge's finance team and executive management review trends of reasons for calls not serviced along with comparative year figures. These reports highlight that the majority of calls not serviced are cancelled because of weather conditions or cancelled by local emergency medical services. To help reduce the frequency of cancelled calls, Ornge consulted with stakeholders throughout 2014 and 2015, including land ambulance emergency medical services and CACCs, to raise awareness about appropriate air ambulance requests. For example, Ornge indicated the CACCs were sometimes requesting air ambulances even when it was clear that land ambulance services would arrive first. In these consultations Ornge introduced a geographic boundary guideline to help determine whether an air ambulance should be requested or not. Specifically, boundaries were to be based on a 30-minute drive under normal driving conditions around each lead trauma hospital for specific emergency medical services near Ornge's hospital bases in Ottawa, Sudbury, Thunder Bay, London, Hamilton and Toronto.

Requests for ambulance service within those geographic boundaries would generally not require an air response because a land ambulance could transport the patient faster. However, Ornge noted that CACCs would still be permitted to exercise judgment and could still request air response for any on-scene call. Ornge advised us that it expects that these boundaries will be used as references tools to help reduce the rate of calls not serviced within these geographic boundaries. Although adoption and implementation of these boundaries is at the discretion of the emergency medical services and CACCs, as of September 2016, 12 CACCs or emergency medical services had communicated the boundaries to their staffs. Ornge had not yet evaluated whether the guideline had resulted in fewer incidents of cancelled calls, but it planned to do so by the end of March 2018.

- *To assist it in adequately overseeing Ornge's ambulance operations, the Ministry should require that Ornge periodically report the number of cancelled and declined calls, categorized by the main reasons.*
  Status: Fully implemented.

Details

Since March 2012, the revised performance agreement requires Ornge to report call volumes to the Ministry on a monthly basis, including the number of requests for service, the percentage of requests serviced and reasons why calls were not serviced. Results for the month ending March 31, 2016 indicated that 30% of the 2,090 total requests received were cancelled. Of those cancelled, 20% were due to the patient being transported by local land ambulance services; 15% due to weather; and the remainder due to more than 15 other reasons, including transports requested in error.

Response Times

Recommendation 4

To enable air ambulance response times to be assessed against performance standards and for reasonableness:

- *Ornge should ensure that all key times in the call-handling process—such as the time the call request is received, the time the call was accepted or declined, and the time the ambulance was airborne—are recorded and that any trends and significant variances from expectations are investigated; and*
  Status: Fully implemented.

Details

With the implementation of Ornge's new computer-aided dispatch system on June 1, 2015, key times are recorded in the call-handling process, including request for service; patient information is complete; weather check complete; call accepted or declined; departure from base; arrival at landing site; and arrival at patient destination.

Ornge's internal reporting on response times includes the following:

- An annual performance report to Ornge's Operations Committee that includes response-time performance for air and land transfers. For example, Ornge must advise callers within 10 minutes of a request for service whether it is able to dispatch an aircraft for scene calls.
- A quarterly report that includes information on whether Ornge has met its response-time targets for air transfers. For example, the time from when Ornge is originally contacted to when the aircraft departs from base must be less than 16.5 minutes for scene calls.
- Daily reporting on calls via the "One Number to Call" initiative to the Ornge's Operations Control Centre (through which CritiCall Ontario, on behalf of the referring hospitals, coordinates inter-facility transport by Ornge of patients whose life or limb is threatened). For example, the time from when Ornge

receives the referral to when the patient arrives at their destination; and

- Daily reporting on dispatch response time from Ornge's Operations Control Centre. For example, the number of instances that Ornge advises callers, within 20 minutes of a request for a high-priority (acute-care) transfer, whether it can dispatch an aircraft.

In December 2015, Ornge's Corporate Quality, Risk and Safety Management Steering Committee struck a multi-disciplinary committee aimed at continuing to improve internal monitoring of response time trends and variances. The "Triage and Dispatch Review Action Group" reviews dispatch decision-making for specific types of calls, including cases where a patient died before Ornge arrived on scene or at a sending facility for inter-facility transports. Cases are presented to the committee through open discussion and follow-up actions are documented along with operational recommendations to the Corporate Quality, Risk and Safety Management Steering Committee, with the intent to improve dispatch decision-making.

In March 2016, the Corporate Quality, Risk and Safety Management Steering Committee also created the "Strategic Analysis of Data Review Action Group," which systematically reviews trends and variances in response times and other performance indicators to make operational recommendations to the Corporate Quality, Risk and Safety Management Steering Committee. The group's first meeting was held in July 2016.

- *the Ministry of Health and Long-Term Care, in conjunction with Ornge, should expand the service agreement's performance requirements to include indicators on response times for the key stages of a patient transport (that is, from the time a call is initially received, to when Ornge is on site, and to when the patient reaches his or her destination).*

Status: Will not be implemented.

Details

The revised performance agreement does not include any measures regarding the time period from when a call is initially received to when Ornge arrives on site, or to when the patient reaches their destination. The Ministry indicated that it did not include these measures in the agreement because of feedback it received from its experts in air ambulance transport. It convened these experts in January and February of 2012 to identify performance indicators used in the air ambulance transport system. The Ministry indicated that, because Ornge's services cover a wide geographic area, the time required to arrive on scene or at a facility depends heavily on distances travelled; therefore, measuring response times based on the time a call is received to the time an Ornge aircraft is deployed more appropriately measures whether Ornge is transporting patients in a timely manner. Consequently, the Ministry has not systematically assessed whether other jurisdictions use "arrival at destination" as a performance indicator, but will raise this issue at the next meeting of a Canadian air ambulance discussion group consisting of provincial representatives from across the country. This group meets quarterly. We continue to believe that this performance measure provides a clear picture of services that would be understandable by air ambulance users.

Oversight of Operational Activities

Recommendation 5

To better ensure the safe provision of air ambulance services:

- *the Ministry of Health and Long-Term Care (Ministry) should periodically conduct unannounced service reviews of air ambulance service providers, including Ornge and its dispatch communications centre;*

Status: Fully implemented.

Details

The revised performance agreement allows the Ministry to enter Ornge's premises unannounced at any time to review Ornge's provision of services and expenditure of funds. Beginning in 2012, unannounced inspections focusing on the paramedic side of Ornge's air and land operations became part of the service certification process, which is required of all ambulance operators (a formal certification process is required every three years to confirm an operator meets legislated certification standards). From April 1, 2015, to June 15, 2016, the Ministry performed 12 unannounced inspections. The Ministry indicated that it has noted improvements at both Ornge and the standing agreement carriers since it started these inspections.

- *Ornge should use its recently improved complaint tracking system to determine whether there are any systemic issues that warrant follow-up; and*
  Status: Fully implemented.

Details

Ornge implemented a new complaint tracking system in February 2011 and indicated that currently all complaints are captured for logging and investigation purposes, and complaint investigations are centrally overseen. Specifically, Ornge re-established its Professional Standards and Compliance Unit in 2012 to report directly to the Director of Paramedic Operations instead of to numerous organizational areas as it did previously. Since 2012, this unit leads complaint investigations and corrective action planning, which includes conducting discussions of results of investigations with relevant departments.

In 2015, Ornge created a classification tool to be used at the conclusion of each complaint investigation to help make its trending analysis more consistent. Ornge's Professional Standards and Compliance unit also reviews trends on a monthly and quarterly basis, with trending data categorized into groups including patient/family behaviour; documentation; medication; medical devices; and patient accidents while in Ornge care. In addition, patient complaint data is reported quarterly to Ornge's Quality of Care Committee and to the Ministry. Stakeholder complaints (for example, from a health-care provider) and any related investigations are reported to Ornge's Operations Committee, which reviews the information and asks questions. Corrective action is taken by the Professional Standards and Compliance Unit and any other applicable business units where required.

- *Ornge should continue to review its quality assessment evaluation measures and update them as necessary to ensure they reflect key elements of good patient care.*
  Status: Fully implemented.

Details

Ornge performs quality assessment evaluations twice per year. This is done by examining a sample of medical charts to determine its performance on a number of clinical indicators. From 2012 to 2013, Ornge conducted a review of its quality assessment evaluation measures through its participation in an international consensus group. The group used evidence-based practices to develop clinical performance indicators and benchmarking tools for critical-care patient transports by air and land. Based on this work, changes were made in April 2015 to the clinical indicators Ornge uses. The updated indicators were first used to evaluate medical charts in the six-month period between April and September 2015, and the results were presented to Ornge's Medical Advisory Committee in December 2015. The Medical Advisory Committee in turn presented its review of Ornge's revised clinical metrics and related performance to its Quality of Care Committee in March 2016.

- *To improve its monitoring of air ambulance services, the Ministry should clarify with Ornge which complaints, incidents and resulting investigations Ornge must forward to the Ministry.*
  Status: Fully implemented.

Details

Ornge's patient advocate is an Ornge staff member who assists patients and their caregivers by providing information on the air ambulance system, responds to their questions and concerns regarding air ambulance transport, and provides information about and assistance with Ornge's complaints and patient-relations processes. The revised performance agreement requires Ornge to immediately submit to the Ministry any complaint received by its patient advocate. Ornge must also submit to the Ministry information on any occurrence of an incident as described in the Ambulance Documentation Standards, which municipal land ambulances are also required to adhere to. For example, the Ambulance Documentation Standards require ambulance operators to report an unusual response or service delay that may have negatively impacted the provision of patient care, or any circumstance that resulted in harm to a patient. Ornge provides this notification to the Ministry and the Ministry then determines, in consultation with Ornge, whether the Ministry, Ornge or both together will conduct an investigation into the complaint or incident. Ornge is required to submit to the Ministry for review any investigations Ornge is responsible for conducting.

Ministry of Transportation

Winter Highway Maintenance

Follow-Up on *April 2015 Special Report*

RECOMMENDATION STATUS OVERVIEW					
	# of	Status of Actions Recommended			
	Actions Recommended	Fully Implemented	In Process of Being Implemented	Little or No Progress	Will Not Be Implemented
Recommendation 1	3	1	2		
Recommendation 2	1	1			
Recommendation 3	1	1			
Recommendation 4	1	1			
Recommendation 5	3		3		
Recommendation 6	5	2		2	1
Recommendation 7	4	2	2		
Recommendation 8	1		1		
Total	**19**	**8**	**8**	**2**	**1**
%	**100**	**42**	**42**	**11**	**5**

Background

Winter highway maintenance in Ontario was done by employees of the Ministry of Transportation (Ministry) and by private contractors up to 2000, when the work was more fully outsourced to private contractors.

From 2000 to 2009, the Ministry used two kinds of contracts for winter highway maintenance work: Managed Outsourcing contracts, where it hired multiple contractors (that had winter equipment) to provide specific services such as plowing, salting and sanding, and Area Maintenance Contracts, which required one contractor to do all summer and winter highway maintenance work in a given geographic area using the Ministry's standards and best practices.

In 2009, the Ministry sought to cut costs by eliminating the Managed Outsourcing contracts and using "performance-based" Area Maintenance Contracts only. Under the new contracts, contractors were no longer told *how* to do the work—only the *outcomes* expected of them. This change resulted in roads not being cleared as effectively as before.

Instead of having to follow the Ministry's historically proven best practices on, for example, the amount of equipment (snow plows, and salt and sand spreaders) required to effectively clear highways, contractors could decide independently how much equipment to use.

In addition, the Ministry procured private contractors primarily on the basis of the lowest price bid, without properly ensuring that winning bidders were fully equipped to provide effective service.

All of these factors led to a decrease in service levels for winter highway maintenance across the province, resulting in less safe driving conditions. Highway maintenance during storms also declined, and the Ministry reduced services for highway shoulders, ramps, and truck-climbing and passing lanes.

While service levels for winter highway maintenance declined with the introduction of the new performance-based contracts, the Ministry did achieve significantly lower costs, and kept costs from rising as much as they would have under the old contracts.

Beginning in late 2012, the Ministry began to negotiate increased equipment and service levels with contractors in an effort to improve winter highway maintenance.

In February 2014, the Standing Committee on Public Accounts requested that we review the winter road maintenance program from one year before it was privatized. Among our findings included in our *2015 Winter Highway Maintenance* special report:

- **Contractors used less equipment under performance-based contracts, resulting in service reductions**—One of the most important factors in adequately maintaining highways in winter is having enough equipment, such as plows and spreaders. The old contracts set out numerous best practices for contractors with respect to how much equipment to use to do an adequate job. However, the Ministry's lowest-bid procurement process for the new contracts created a natural incentive to cut costs in order to win contracts. Most contractors aggressively minimized their winter equipment fleets, reducing their ability to meet contract requirements and leading to reduced service.
- **Contractors used less treatment material to service highways under performance-based contracts**—Spreading treatment materials such as salt, sand and anti-icing liquids over highways is important for winter maintenance. The Ministry's lowest-bid procurement process again created a natural incentive for contractors to cut costs by using less treatment material. Under the old contracts, contractors had to reimburse the Ministry if they did not use minimum stipulated amounts of treatment materials, ensuring that contractors would at least use these minimums. Under the new contracts, this reimbursement requirement was eliminated, so contractors no longer had any incentive to use the same amount of salt or sand. For anti-icing, some contractors chose to use none at all.
- **Contractors were unable to meet contract requirements**—Ministry audits identified about 1,100 instances in 2013/14 where contractors did not meet multiple outcome targets of their contracts. About half of these related to contractors being unable to complete highway-clearing circuits on time. The failure to meet this target could often be attributed to insufficient equipment, which put the safety of the public and of emergency-services providers at risk because contractors did not plow or salt at all, did so too infrequently, or drove equipment too quickly for the plowing and salting to be fully effective.
- **The procurement process did not adequately factor in contractors' ability to deliver required services**—The procurement process had two stages for contractors that met the minimum pre-qualification requirements. In the first, contractors submitted winter maintenance strategies, which the Ministry scored on a set of criteria. Any contractor

that scored 70% moved to the second stage, in which the contractor proposing the lowest price won the contract. Because of how points were assigned for the different criteria, it was possible for contractors to score 70% and pass on to the bid stage without meeting all the requirements needed to deliver adequate service. For example, the proper amount of equipment is crucial for maintaining winter highways, but having enough equipment accounted for only 15% of the scoring criteria in the first stage. Once at the second stage, qualitative differences between contractors were irrelevant in choosing the winning contractor—the only factor considered from this point on was how low a price the contractor bid.

- **Procuring the lowest bidder can cost more in the long run**—We noted one case where the second-lowest bidder had a much bigger equipment fleet than the lowest bidder, which won the contract. Specifically, for an annual price of only $700,000 more, the second-lowest bidder proposed the use of 22 more pieces of equipment than the winning contractor. As the winning bidder ultimately failed to meet required service levels, the Ministry incurred an annual additional cost of $1.7 million for 13 additional pieces of equipment. Had the second-lowest bidder won the contract, the area could have been served with significantly more equipment for roughly $1 million less.
- **Over-reliance on contractors' self-reporting their performance**—Verifying whether contractors met certain outcome targets can be done only in the field during and immediately after snowstorms. However, we noted that most audits conducted by the Ministry were "desk audits," conducted a few weeks after a storm, using GPS tracking data and information from contractors self-reporting their own performance. This presented a potential conflict of interest: it was not in the contractors' interest to report that they have not achieved outcome targets, and contractors were aware that the Ministry has only a minimal presence in the field. Although this was the case, Ministry desk audits still found many instances of inaccurate or incomplete information reported by contractors.

We made a number of recommendations for improvement and received commitments from the Ministry that it would take action to address them.

Status of Actions Taken on Recommendations

The Ministry of Transportation (Ministry) provided us with information in summer 2016 on the current status of the recommendations in our *2015 Winter Highway Maintenance* special report. Based on our review of the information, the Ministry has fully implemented 42% of our recommendations. These recommendations relate to improving contractor performance and public awareness of winter road conditions. For example, the Ministry is providing additional tools on the Ontario 511 website to help people monitor actual road conditions and the progress of road clean-up.

The Ministry has also made significant progress on 42% of the other recommendations. It has already begun to make some swift, needed changes to how it manages contractors that perform winter maintenance. Nevertheless, since the performance-based contracts are in effect until 2026, it will take the Ministry until then to fully implement all of our recommendations.

The status of each of our recommendations is as follows.

Quantities of Equipment

Recommendation 1

To ensure effective winter highway maintenance and enhance road safety, the Ministry of Transportation should:

- *verify that contractors have a sufficient quantity of each type of winter equipment, in good working order, in all contract areas (this might include introducing guidance for contractors to use in their equipment calculations relating to circuit times, circuit lengths and equipment speeds);*

- *if it determines that an area has an insufficient quantity of each type of winter equipment for effective highway maintenance, work with that area's contractor to resolve issues and bring winter road maintenance to effective levels;*
  Status: In the process of being implemented by fall 2017.

Details

The pre-2009 Area Maintenance Contracts required that the minimum amount of equipment needed to properly plow and salt highways be calculated using a formula based on the Ministry's best practices. However, our 2015 audit had found that the new contracts removed this requirement, thereby allowing contractors to use less equipment. Contractors working under the new contracts were found to be using 22% less equipment than they previously used, which led to a reduction of service. Our audit had also found that plowing and salting service levels in a few contract areas had decreased because contractors used poorly functioning equipment.

In our current follow-up, we found that the Ministry has implemented requirements for calculating equipment complements into a new contract awarded for the Kenora area, the only new contract since our audit in 2015. The contract for Kenora also required the contractor to develop and follow an equipment maintenance strategy that ensures that equipment will be in good working order throughout the winter season. For instance, this strategy required that the contractor have on hand spare equipment equal to 10% of its actively used equipment.

For the 19 other contracts already in place elsewhere in the province, equipment counts were brought to sufficient levels through change orders or contract amendments that required additional plows, salt spreaders and combination units. A total of 22 plows, 16 salt spreaders and 20 combination units have been added in these 19 contract areas.

As of the winter of 2015/16, the Ministry began ensuring that equipment is in good working order by requiring that contractors' equipment meet reliability criteria for about 20 different inspection components. For example, one requirement is that plow blades should be undamaged and hydraulic systems to lift and move them should be properly working. These contractor self-inspections are required to be done at the start of the winter, and then monthly throughout the winter season.

For the 2015/16 winter, contractors in two areas did not perform these inspections at the start of the winter; and contractors in 10 areas either did not perform monthly inspections during the winter, or their equipment was not reliable. For those contractors that performed the inspections, the Ministry gave them an incentive of $4,000 to regularly inspect and maintain each piece of equipment. We encourage the Ministry to continue finding ways to ensure that contractors in the remaining areas conduct these inspections and have the required equipment in good working order.

AUDITOR GENERAL'S RECOMMENDATION

We recognize that the Ministry has taken action to ensure that equipment is in good working order throughout the winter season by providing contractors with a financial incentive for the existing 19 areas. However, we recommend that the Ministry re-evaluate the necessity of providing incentive payments to contractors given that keeping equipment in good working order should be included in the cost of doing business with the government.

- *establish protocols for appropriately and consistently responding to requests from its staff for increased winter highway maintenance.*

  Status: Fully implemented.

Details

In 2015, we found that Ministry staff and engineers could make requests for more frequent plowing in certain areas such as ramps, shoulders and passing lanes. However, when such requests were made, there was no formal process to approve them, and no guidelines or protocols for accepting or refusing them. In addition, requests were accepted or denied on an inconsistent basis.

Since our audit, the Ministry implemented a process in October 2016 where requests for increased plowing frequencies would be assessed using common assessment criteria. For example, while reviewing these requests, staff are required to determine whether the existing plowing frequencies have fallen below its own best practices and standards. If it is determined that this is the case, staff are required to look for the most economical way to bring up service levels.

A guideline implemented in October 2016 under this new process also requires that staff document a reason when any request for increased plowing frequencies is not approved.

The guideline also says that staff should review the list of requests for consistency and to identify trends that can be incorporated into best practices and standards as required. The list is required to be maintained for each contract area.

Proactive Use of Materials

Recommendation 2

To help ensure that contractors use treatment materials proactively to perform effective winter highway maintenance, the Ministry of Transportation should re-establish cost-sharing arrangements and other measures that encourage such proactive use of materials in all contract areas.

Status: Fully implemented.

Details

In 2015, we found that under the new performance-based Area Maintenance Contracts, contractors no longer had to pay the Ministry if they failed to use a minimum amount of salt. This created an incentive for contractors to save money by using less salt.

In addition, the amount of anti-icing liquid to use was left entirely up to the contractor, as long as outcome targets relating to ground frost and slippery road conditions were met.

Since the audit, sand and salt cost-sharing thresholds have been re-established in all contract areas. The minimum amount of salt that a contractor should use is based on the five- to 10-year average historical salt usage in that area. If the salt used by the contractor is less than this minimum amount, the contractor is required to reimburse the Ministry for the low usage.

The Ministry has also made changes to encourage the contractor to use anti-icing liquids. In the Kenora area contract, the only new contract awarded since our audit, the Ministry began requiring the contractor to use anti-icing liquids, and also specifies the minimum amount to use.

For the remaining 19 contract areas, the Ministry offered the contractor similar cost-sharing incentives for the use of anti-icing liquids. The incentives require contractors to pay the full cost of the first and second applications of liquid. After that, the Ministry begins to pay a sliding share of the cost that reaches 75% after the seventh application. We noted that contractors in 13 out of the 19 areas used anti-icing liquids. Contractors in the remaining six areas did not use anti-icing liquids; instead, they implemented other measures such as faster deployment of plows and salters, which they believed were more effective than applying anti-icing liquids in their contract areas.

Contractor Responsibilities

Recommendation 3

To ensure that winter highway maintenance activities are timely and effective, and to ensure that highway

and weather conditions are accurately reported to the Ministry of Transportation (Ministry), the Ministry should prescribe in detail the responsibilities of contractors for patrolling and ensure it obtains the information necessary to assess the contractors' ability to meet those responsibilities.

Status: Fully implemented.

Details

Our 2015 audit found that there were no outcome targets for patrolling by contractors—the only requirement, not tied to any minimum number of hours of operation, was that they "be aware" of road and weather conditions.

Since our audit, patroller training for contractors was provided in fall 2015. We obtained attendance sheets for the training, and noted that representatives from all 20 contract areas were in attendance. The training addressed patroller responsibilities, areas requiring high attention, and use of various online tools to monitor weather conditions.

Changes in patrol requirements were made only for those contract areas where patrolling was an issue. In the Kenora area contract, the only new contract awarded since our audit, the Ministry included prescriptive requirements for patrolling, including patrols at least once every 12 hours for Class 1 and 2 highways, and once every 24 hours for all other classes of highways. In addition to these minimums, contractors are required to perform additional patrols as needed at times of unfavourable weather events, emergencies and unusual situations, such as special events.

For those contracts already in place at the time of the audit, the Ministry identified six areas where the level of patrolling was an issue. It added new and improved patrolling requirements in these areas. For the remaining 13 areas, the Ministry informed us that patrolling was not identified as an issue, so no changes were made. However, it will continue to monitor these areas to ensure that patrolling is at an acceptable level.

The Ministry also added about 70 dashboard cameras to patrol vehicles in six contract areas to help obtain information required to verify road conditions reported by patrollers. In addition, a total of about 54 stand-alone roadside cameras were installed: 25 in the West Region, 23 in the North East Region, and six in the East Region. An additional 12 were in the process of being installed in the North West Region.

The Ministry added about 69 smart phones and 12 tablets in six contract areas to support reporting of road conditions, collisions and circuit times. These devices generate emails that track the time that weather conditions were observed, location, and details such as visibility, wind, precipitation, cloud, fog, and primary and secondary road conditions.

Ontario 511 Reliability

Recommendation 4

To improve the reliability of the Ontario 511 website, the Ministry of Transportation should monitor when information is collected in each area and update the website regularly, clearly indicating the time at which the information on road conditions was observed by the contractor.

Status: Fully implemented.

Details

In 2015, we found that highway conditions reported on the Ontario 511 website did not accurately reflect when the conditions were observed. In turn, the Ministry was incorrectly reporting data on its Ontario 511 website, which the public consults for information on highway conditions.

In our current follow-up, we noted that the Ministry added time stamps to road-condition updates on Ontario 511 to indicate the time the contractor observed the road condition. Road conditions include bare, partly covered, covered and reduced visibility.

The Ministry also added four new Road Weather Information Systems (RWIS) and 16 cameras to existing RWIS systems. Camera footage from these systems is uploaded for the public to view.

In order for drivers to obtain even more detailed information on the estimated completion time of snow removal, the Ministry launched the "Track My Plow" feature. This map-based feature allows drivers to track, on a real-time basis, where plows are on their highways, and which sections of highways were recently plowed. For the 2015/16 winter season, it was implemented across seven contract areas (Bancroft, Chatham, Durham, Huntsville, Kingston West, Owen Sound and Simcoe). In the 2016/17 winter season, the Ministry intends to expand it to an additional six contract areas (Kingston East, London, Niagara-Hamilton, Ottawa, Peel/Halton and Toronto/York). All information is available through a link from Ontario 511.

In addition, as previously mentioned under the details of Recommendation 3, the Ministry provided training to patrollers on the importance of accurately reporting changing road and weather conditions: 476 Area Maintenance Contract staff attended 18 training events covering all 20 contract areas.

Procurement of Contractors

Recommendation 5

To ensure that the Ministry of Transportation (Ministry) procures contractors that can provide effective winter highway maintenance, the Ministry should:

- *require tendering contractors to submit detailed and appropriate information in their proposals that demonstrates their ability to meet the required level of service;*
  Status: Fully implemented for only the Kenora area. In the process of being implemented for all other contract areas by 2026.

Details

In 2015, our audit found that contractors were winning contracts based on having submitted the lowest bid price; final selection did not distinguish between better-equipped, adequately equipped and inadequately equipped contractors. Once winter maintenance was increasingly being delivered under this approach, service levels began deteriorating, and there was an increase in the number of collisions on Ontario highways where snow, slush or ice was a factor.

Since our audit, the Ministry has begun using a Route Analysis Form to calculate the quantity of equipment needed to meet the required level of service, based on its best-practice circuit lengths, equipment speeds and times. It used this form in awarding a new contract in Kenora (the only new contract awarded since our audit in 2015).

The remaining contracts will expire over several years, with the last contract expiring in 2026.

- *develop an evaluation process that appropriately weights critical factors and includes assessing proposals against the Ministry's historically proven best practices to ensure that the contractor can effectively deliver the required level of service; and*

- *select the winning proposal using a best-value approach that considers both the price and quality of the proposal.*
  Status: Fully implemented for only the Kenora area. In the process of being implemented for all other contract areas by 2026.

Details

In 2015, we found that the award of winter highway maintenance contracts would benefit from a best-value rather than lowest-bid approach, as contractors that bid the lowest are not necessarily the most qualified with the right level of equipment.

During our follow-up, we noted that the Ministry put in place an evaluation process that weighs significant aspects of road maintenance in a point system that ultimately decides the award. To ensure consistency among evaluators, the Ministry developed very detailed explanations for each area to be scored. In order of priority and weighting, categories to be scored include winter vehicles, patrolling, labourers and operators, quality management, contract management personnel, ground

frost strategy and slippery conditions strategy. Best practices, such as speed while spreading and plowing for each highway class, are taken into account. For example, best practice indicates that the optimal speed for equipment while spreading on a Class 1 highway is 32 kilometres per hour. The total amount of equipment needed would be based on this speed.

The Ministry awarded the Kenora area contract in April 2015 using the above criteria; this has been the only contract awarded since our audit. The remaining contracts will expire over several years, with the last contract expiring in 2026.

It also attempted to procure three other contracts using this approach; however, bids came in higher than expected and, therefore, the procurement tenders were cancelled and the contracts were never awarded. The Ministry informed us that the bids were likely high because contractors submitted quotes that included higher-than-required service levels in order to maximize bid scores. As a result, the Ministry is now in the process of developing a revised model for use on future tenders. The Ministry informed us that the revised model will continue to have minimum equipment requirements similar to the ones found in the Kenora contract (as discussed earlier in this recommendation).

Oversight of Contractors' Performance

Recommendation 6

To improve its oversight of contractors' performance and to ensure consistent oversight across the province, the Ministry of Transportation should:

- *develop a standardized process for conducting audits (integrating in-storm observations) and issuing fines, and ensure that staff are adequately trained and equipped with all the tools needed to implement this process;*
  Status: Fully implemented.

Details

In 2015, we found that risk factors, such as highway traffic volumes, weather patterns, and the number of fines previously issued to a contractor, were not the basis for audit selection. In addition, the Ministry, since the adoption of Area Maintenance Contracts in 2009, had yet to develop standards for conducting audits and documenting results.

Since our audit, the Ministry retained an independent consultant to develop a risk-based assessment. The consultant created a strategy that assesses audit frequency based on the following categories: 50% on past performance of contractors, 10% on severity and frequency of weather-related traffic conditions, 10% on class of highway, 10% on issues management, 5% on road closures, and 5% on communication and corrective actions. Once this was created, the Ministry provided training based on the new strategy in September and November 2015. We reviewed the training materials and noted there were detailed explanations of how contractors should be rated, on a scale of one to five, under each category. For example, a contractor would be considered high risk (5/5) for the past-performance indicator if it needs to improve because of a chronic issue, or if it frequently misses outcome targets. How frequently a contractor is audited depends on its risk rating. For instance, a contractor rated high risk is to be audited twice per winter on all of its routes with respect to each outcome target.

If these planned audits show there is a large variance between a contractor's outcome target and actual performance, the Ministry will conduct a focused audit to review what occurred. For example, if the target was to achieve bare pavement in eight hours but the contractor took 20 hours, the focused audit would attempt to determine the reasons for the large variance.

The Ministry also conducts ad hoc audits if a special request is received or investigation required. This request can come from a variety of sources, such as the OPP.

In addition, the Ministry added 20 new oversight staff to increase in-storm monitoring: one

Maintenance Co-ordinator and 19 Contract Services Inspectors.

- *ensure that decisions to waive fines are appropriately justified and documented, and are consistently applied throughout the province;*
  Status: Will not be fully implemented.

Details

In 2015, we found that Ministry staff at regional offices had the discretion to waive financial consequences (fines) that should be levied against contractors for not meeting their outcome targets. This undermines the effectiveness of fines and has resulted in inconsistencies in how the Ministry responds to service failures in the province.

Since the audit, the Ministry has created a process and provided training to assist staff in dealing with non-compliance by contractors. For example, if an audit shows that a contractor has not met outcome targets, Ministry staff are required to consider prior performance and other relevant factors in determining whether further action should be taken. If so, a notice of non-conformance is prepared and provided to the contractor, which is to provide a response.

In reviewing contractor responses, the Ministry has implemented new procedures to ensure consistency in applying fines. Large fines (those above $50,000) are now required to be reviewed for consistency by a central committee consisting of the province's five Regional Maintenance Engineers and other senior managers.

For fines below $50,000, the Ministry has not implemented specific procedures to ensure provincial consistency. However, it did implement procedures to ensure regional consistency—in other words, ensuring consistency within one region across different contract areas. It now requires all fines below $50,000 to be reviewed by the Regional Maintenance Engineer within that region. The Ministry informed us that, instead of standardizing the issuance of these fines, the Ministry would like to allow latitude for regional staff to make these decisions. This is because fines can be reduced for a number of reasons such as contractor responses and extreme weather conditions. As a result, the Ministry will not be fully implementing this recommendation.

AUDITOR GENERAL'S RESPONSE

Although some degree of discretion is definitely appropriate, it is important that consistent decision-making on fines be in place. Although steps have been taken to outline a decision-making process, it is still important that rules around issuing and waiving fines guide decisions.

- *establish a target number of audits for each contract area based on appropriate risk factors;*
  Status: Fully implemented.

Details

In 2015, we found that the number of audits conducted depended on the level of staff available at the time of the audit, rather than the need for an audit. Targets were based on audits per Co-ordinator, but since staffing levels fluctuate, so did the number of audits. Instead, the number of audits should be set according to a predetermined plan of audits to be completed based on each area's assessed level of need, with staffing managed to ensure that the plan is followed.

Following the audit, in December 2015, the Ministry used the risk-based model created by its consultant that calculates the number of audits based on risk level per contract area for winter 2015/16. The risk assessment is to be recalculated every winter, which in turn will affect this calculation annually.

- *develop and implement a robust centralized system that tracks the results of all audits and fines to better enable provincial analysis of contractors' performance; and*
  Status: Little or no progress.

Details

In 2015, the Ministry was in the process of completing the development of a central database to store

information gathered from audits; however, at the time of the audit, the data was incomplete and inaccurate.

Since the audit, the Ministry has made no changes or updates to address this recommendation. The Ministry intends to begin developing a new web-based contract management system in fall 2016. This new system would better allow it to track results of audits and fines than the current system that is being used.

- *consider incorporating contractor liability for inadequate winter highway maintenance in performance-based contracts to the extent that it is reasonable and possible.*
  Status: Little or no progress.

Details

In 2015, we found that the Ministry bears the legal responsibility to maintain and keep in repair provincial highways, and bears the legal liability for failure to do so. Under the government-operated road liability insurance program, primarily the Province, not contractors, may be exposed to paying damages if inadequate road maintenance is a contributing factor in vehicle collisions.

Since the audit, the Ministry has met with the Risk Management and Insurance Services Branch (within the Ministry of Government and Consumer Services) to discuss material non-compliance and indemnity clauses. It plans to review information from this meeting as part of the development of future contract models; however, it has done little work on this action to date.

Reportable Information

Recommendation 7

To monitor contractors' performance against its bare-pavement standard and to provide meaningful reports to the public on the effectiveness of winter highway maintenance, the Ministry of Transportation (Ministry) should:

- *correct any information that it has determined is inaccurate before publicly reporting its results;*
  Status: Fully implemented.

Details

In our 2015 audit, we were concerned about the accuracy of the information the Ministry received from contractors, as we noted that Co-coordinator audits identified over 200 instances of contractors submitting inaccurate information to the Ministry.

According to the Ministry, three groups of people are best able to identify inaccurate information: contractors themselves, the regional communication centre operators who collect the information from the contractors, and the Ontario 511 website operators. Since the audit, the Ministry has provided training to contractors and to the regional operators who collect information from the contractors. Each of these contractors and operators is to assess the information for any trends that may contradict weather information submitted.

The Ministry is continuing to look at ways to further ensure the accuracy of the information submitted. For instance, it is considering the reasonability of requiring the regional communication centre operators to view camera footage to verify that the information received is, in fact, accurate. This is currently not a standard requirement, although some operators choose to do so because it is their job to collect, organize and assess for reasonability the information collected from contractors.

- *consider publicly reporting contractors' performance against its bare-pavement standard by contract area;*
  Status: Fully implemented.

Details

In 2015, we found that the Ministry publicly reports whether its target for achieving bare pavement was reached across the province. The target is that bare pavement be achieved within the time limit for each class of highway for 90% of the storms in a winter season. However, we noted that this

achievement rate reported by the Ministry was the average for the province as a whole, and that the achievement rate for each contract area was not publicly reported. During our audit, we had found that six of the 20 contract areas did not achieve the performance target.

Since the audit, in September 2016, the Ministry has begun publicly releasing bare-pavement results for each contract area starting with the 2015/16 winter season. This is also supplemented with a winter severity index (WSI). A WSI takes into account snowfall, surface ice, rainfall with low temperatures, cold days, blowing snow and warm weather adjustment factors to calculate a number that signifies how severe the winter was. The Ministry worked with the University of Waterloo to develop this index. Having the WSI information for each contract area will help the Ministry and public put contractors' performance results into context—for instance, some winter storms may be so severe that restoring bare pavement within required time limits may be beyond the control of the contractor. As a result, it will be useful for the public to know how severe the winter was in a contract area when contractors' performance results are being reviewed.

- *supplement its public reporting on the bare-pavement standard with information on how highways are being maintained during a storm;*
  Status: In the process of being implemented by fall 2017.

Details

In 2015, we noted that the bare-pavement target of eight hours on its own was not a measure of whether the winter maintenance activities undertaken during a storm leading up to the bare pavement being achieved had been effective.

Since the audit, the Ministry has made efforts to notify the public as to what is occurring during a storm, and also during the eight hours after a storm ends and before bare pavement is required to be achieved. (For some less-travelled highways, it can be up to 24 hours after a storm ends before bare pavement is required to be achieved.)

The Ministry has drafted a model identifying potential performance measures that could be implemented in addition to bare pavement, such as deployment times, circuit times achieved, and return-to-normal operating speeds. However, further work is required to implement tracking and reporting on these measures.

However, the Ministry informed us that, in the meantime, other advancements it has made will assist the public in understanding contractors' in-storm performance. The Track My Plow feature was implemented in seven of the 20 contract areas for the 2015/16 winter, and in 13 of the 20 contract areas for 2016/17 winter. This feature can be easily accessed through the Ontario 511 website.

- *assess the adequacy of its bare-pavement time limits in light of the more stringent time limits of other jurisdictions and update its time limits accordingly.*
  Status: In the process of being implemented by fall 2018.

Details

In 2015, we found that Ontario's bare-pavement time limit of eight hours after a storm ends for Class 1 highways was longer than that of other jurisdictions at the time.

Since the audit, in July 2016, the Ministry has completed a jurisdictional scan to assess the adequacy of its bare-pavement time limits. The Ministry agrees that some jurisdictions had lower bare-pavement time limits for highways with high traffic volumes. As a result, the Ministry is reviewing its bare-pavement time limit for highways with high traffic volumes. It is currently gathering information that will assist it in determining what the new bare-pavement time limits could be for these highways.

Impact of Remedial Measures

Recommendation 8

The Ministry should continue to monitor and assess the impact of the remedial measures taken to improve winter highway maintenance to determine whether additional measures are needed to restore highway maintenance and service to the levels delivered before the introduction of performance-based AMCs.

Status: In the process of being implemented by fall 2017.

Details

We noted during our 2015 audit that the Ministry had begun to take action to respond to poor contractor performance by restoring service levels and procuring more equipment for truck-climbing and passing lanes, conducting a high-level program review, procuring more equipment for freeway shoulder and ramp maintenance, adding more Ministry staff positions, and negotiating with contractors to improve service levels and address performance issues.

Since the audit, the Ministry implemented a number of changes to improve winter highway maintenance and restore service levels. These changes included adding 58 pieces of equipment over all contract areas, implementing cost-sharing initiatives for materials used in winter maintenance in all contract areas, adding patrolling requirements in priority areas, increasing the reliability and accuracy of information provided to the public, adjusting the contract-awarding process away from the lowest bid, and creating an audit selection process based on risk.

Although the Ministry has awarded only one contract since our audit, it developed and included in the new contract certain standard additions, such as equipment quantity calculations, winter materials cost-sharing incentives, and patrolling requirements that will improve the effectiveness and performance of contractors.

Although there is still some work remaining to implement all recommendations, the Ministry continuously monitors and assesses the impact of its remedial measures. It continues to monitor maintenance concerns expressed by its staff and problems shared by contractors by having frequent discussions with them. The Ministry has also established a full-time director role to oversee maintenance activities and implement improvements as required. Since our audit, the Ministry has made significant improvements (that are discussed throughout this report) in many areas where a reduction in service levels (such as patrolling and insufficient winter equipment) had been experienced.

Chapter 3

Follow-Up on Reports Issued by the Standing Committee on Public Accounts

Summary

The Standing Committee on Public Accounts (Committee) (see **Volume 1 – Chapter 6**) holds hearings throughout the year when the Legislature is in session on chapters in our Annual Reports or our special reports, and presents its observations and recommendations in reports that it tables in the Legislative Assembly.

This year we followed up on the status of the implementation of the Committee's recommendations from six Committee reports tabled between March 2015 and November 2015 and on the status of the concerns raised in the Committee's reports on Ornge Air Ambulance and Related Services tabled in 2014. Our objective is to provide the Committee with information on the actions being taken by audited entities to provide the requested information and address the recommendations that the Committee made in its reports to the Legislature.

Our follow-up work consists primarily of inquiries and discussions with the government, the relevant ministries or broader public sector entities and a review of the status reports they provide to the Committee. In a few cases, the organization's internal auditors also assisted us with this work. As this is not an audit, we cannot provide a high level of assurance that the corrective actions described have been implemented effectively. The actions taken or planned may be more fully examined and reported on in future audits. Status reports will factor into our decisions on whether future audits should be conducted in these same areas.

As noted in **Figure 1**, progress has been made toward implementing 77% of the Committee's 70 recommended actions, including 44% of them that have been fully implemented. There has been little or no progress on 20% of the recommended actions and 3% of them will not be implemented. More specific details are presented in the sections that follow **Figure 1**.

Figure 1: Overall Status of Implementation of Recommendations from the Standing Committee on Public Accounts
Prepared by the Office of the Auditor General of Ontario

			Status of Actions Recommended			
Report	# of Recs	# of Actions Recommended	Fully Implemented	In Process of Being Implemented	Little or No Progress	Will Not Be Implemented
3.01 Cancer Screening Programs Tabled Nov 23, 2015	9	9	8.0	1.0	–	–
3.02 Education of Aboriginal Students Tabled Mar 22, 2016	6	6	5.0	1.0	–	–
3.03 Financial Services Commission of Ontario–Pension Plan and Financial Service Regulatory Oversight Tabled Jun 2, 2015	14	22	8.0	4.0	10	0
3.04 Infrastructure Ontario–Alternative Financing and Procurement Tabled Jun 2, 2015	6	12	9.0	1.0	2	–
3.05 Ornge Air Ambulance and Related Services Tabled Oct 30, 2014	This Report did not include recommendations, but we did do a follow-up to review the status of the issues raised by the Committee.					
3.06 Public Accounts of the Province Tabled Apr 5, 2016	5	5	4.0	1.0		
3.07 Smart Metering Initiative Tabled Nov 24, 2015	8	10	8.0	0	1	1
3.08 University Undergraduate Teaching Quality Tabled Jun 3, 2015	5	6	2.3	1.7	1	1
Total	**53**	**70**	**44.3**	**9.7**	**14**	**2**
%		**100**	**63**	**14**	**20**	**3**

Chapter 3
Section
3.01

Cancer Screening Programs

Standing Committee on Public Accounts Follow-Up on Section 4.01, *2014 Annual Report*

The Committee held a public hearing in September 2015 on our 2014 follow-up to the audit of Cancer Screening Programs we conducted in 2012. The Committee tabled a report in the Legislature resulting from this hearing in November 2015. The full report can be found at **www.ontla.on.ca/committee-proceedings/committee-reports/CancerScreeningPrograms**.

The Committee made nine recommendations and asked Cancer Care Ontario and the Ministry of Health and Long-Term Care (Ministry) to report back by the end of March 2016. Cancer Care Ontario and the Ministry formally responded to the Committee on March 21, 2016. A number of issues raised by the Committee were similar to the audit observations in our 2012 audit, which we followed up on in 2014. The status of the Committee's recommendations is shown in **Figure 1**.

The majority of the Committee's recommendations were requests for further information from Cancer Care Ontario and the Ministry. All information requests were met. Cancer Care Ontario confirmed that it will update the Cancer System Quality Index website annually. Recommendation 5

Figure 1: Status of Actions Recommended in November 2015 Committee Report
Prepared by the Office of the Auditor General of Ontario

	# of Actions Recommended	Status of Actions Recommended			
		Fully Implemented*	In Process of Being Implemented	Little or No Progress	Will Not Be Implemented
Recommendation 1	1	1			
Recommendation 2	1	1			
Recommendation 3	1	1			
Recommendation 4	1	1			
Recommendation 5	1		1		
Recommendation 6	1	1			
Recommendation 7	1	1			
Recommendation 8	1	1			
Recommendation 9	1	1			
Total	**9**	**8**	**1**	**0**	**0**
%	**100**	**89**	**11**	**0**	**0**

* Some recommendations required Cancer Care Ontario and the Ministry to provide information to the Committee. The cases in which Cancer Care Ontario and the Ministry provided the information as requested we have counted as "fully implemented."

is outstanding—Cancer Care Ontario is doing more work on performance indicators for follow-up colposcopies, and expects to have indicators in place in the 2017/18 fiscal year.

Figure 2 shows the recommendations and the status details that are based on responses from Cancer Care Ontario and the Ministry and our review of the information they provided.

Figure 2: Committee Recommendations and Detailed Status of Actions Taken

Prepared by the Office of the Auditor General of Ontario

Committee Recommendation	Status Details
Recommendation 1 Cancer Care Ontario provide the Committee with the range of wait times for mammography screening and genetic assessments, and compare to the benchmark and explain any material variances. **Status: Information provided.**	Cancer Care Ontario noted that it does not collect information on the wait time between when a patient schedules a screening mammogram and when the screening mammogram actually takes place, and that it is unlikely that individual cancer centres maintain such wait time data. This is because screening mammograms are scheduled to occur when women are due to be screened (for instance, every two years), so the time women waited to receive a screening mammogram is simply aligned to the clinically appropriate interval between procedures and does not represent an actual wait time. Cancer Care Ontario further explained that the practice of excluding time waited to receive a screening mammogram is consistent with the practice of Ontario's wait time reporting for diagnostic imaging, which excludes time waited for an appointment that is purposefully scheduled at certain intervals. In addition, Cancer Care Ontario indicated that there is no Canadian benchmark for the wait time for mammography screening. Instead of reporting on mammography screening wait times, in practice, Cancer Care Ontario reports on the wait time from abnormal screen result to final diagnosis. The benchmark is five weeks if biopsy is not required, and seven weeks if biopsy is required, according to guidelines established through the Canadian Partnership Against Cancer. With respect to the former, where biopsy was not required, in the year ending March 31, 2015, 93% of eligible women between 50 and 74 years old with an abnormal screening mammogram result received final diagnosis within five weeks of the abnormal screen result. With respect to the latter, where biopsy was required, 78% of women in this age group received final diagnosis within seven weeks of an abnormal screen result. Cancer Care Ontario has 13 regional cancer programs, whose boundaries are aligned with the 14 Local Health Integration Networks across Ontario (one regional cancer program covers both the Mississauga Halton LHIN and the Central West LHIN). These regional programs bring together health-care professionals and organizations involved in cancer prevention and care. The regional programs are required to ensure that service providers meet the requirements and targets set out in their partnership agreements with Cancer Care Ontario. Regional cancer programs that were unable to meet the wait time guidelines provide Cancer Care Ontario on a quarterly basis with analysis, improvement plans, and reasons for recent successes. Examples of improvement activities reported by regional cancer programs include hosting an education day to address the image transfer process, implementing LEAN processes (a business-operation methodology aimed at creating more value for customers with minimal waste), creating more biopsy days, and expediting the booking of assessments. For genetic assessment, based on its knowledge gathered from regular monitoring of other jurisdictions for significant developments in breast cancer screening, Cancer Care Ontario noted that its High Risk Ontario Breast Screening Program is the first organized breast screening program targeted at a high-risk population and that there are no known relevant national or international benchmarks for wait times for this specific program. From July 2014 to June 2015 (most recent data available at the time of this follow-up), the wait time from an initial physician visit to genetic counselling was 83 days for half of the patients who were treated (median). In the same period, wait times across Ontario ranged from a minimum of 0 days to 360 days.

Committee Recommendation	Status Details
Recommendation 2 Cancer Care Ontario ensure that its Cancer System Quality Index website is regularly updated with the most recent data available. **Status: Fully implemented.**	Cancer Care Ontario updates its Cancer System Quality Index on an annual basis. Cancer Care Ontario explained that its data sources, such as the Ontario Health Insurance Plan and the Ontario Cancer Registry, consider data to be complete and ready for use six months and 12 months, respectively, after data submission. As well, it takes time to collect, validate, analyze and interpret data. The information contained in the latest update of May 2016 included: • colorectal cancer screening data from 2014; and • breast cancer screening participation data from 2013 and 2014 (the data covers a two-year period because screening mammography is recommended at two-year intervals).
Recommendation 3 Cancer Care Ontario report back to the Committee on the expected implementation date of the fecal immunochemical test for use in colon cancer screening. **Status: Information provided.**	Cancer Care Ontario plans to implement the fecal immunochemical test for use in colon cancer screening by March 2018. It began detailed planning in August 2015, which included: • working with the Ministry to identify and understand any required legislative and regulatory changes; • defining procurement requirements for the laboratory services and test kits; and • defining changes required to existing Cancer Care Ontario operations, such as data reporting and correspondence regarding cancer screening.
Recommendation 4 Cancer Care Ontario provide the Committee with the range of wait times for follow-up colonoscopies, and compare to the benchmark and explain any material variances. **Status: Information provided.**	For follow-up colonoscopies, the wait time benchmark is eight weeks from the time of an abnormal fecal occult blood test (FOBT), a test to look for colorectal cancer, to the date of a follow-up colonoscopy, according to the Canadian Association of Gastroenterology. Cancer Care Ontario reported that 46% of eligible individuals between 50 and 74 years old who had an abnormal FOBT result in 2014 waited eight weeks or less to undergo colonoscopy, compared to 38% in 2011. In 2014, individuals waited 11 weeks on average (mean), half of the patients waited almost eight weeks (median), and wait times across Ontario ranged from one day to 365 days. (Cancer Care Ontario does not measure wait times beyond 365 days because it noted that colonoscopies performed more than 365 days after a positive FOBT test may have been performed for a different indication.) Cancer Care Ontario noted that these wait times could be over-estimated as it cannot account for any delays that might be initiated by the individuals, such as if the person chooses to defer the colonoscopy. Cancer Care Ontario expects to release 2015 wait time information in May 2017. Regional cancer programs that were unable to meet the wait time guidelines provide Cancer Care Ontario on a quarterly basis with analysis, improvement plans and reasons for recent successes. Examples of improvement activities reported by regional cancer programs include working with primary care providers to improve timeliness of referrals for colonoscopy, and working directly with endoscopists' offices to ensure that colonoscopies for persons with an abnormal FOBT are appropriately prioritized.

Committee Recommendation	Status Details
Recommendation 5 Cancer Care Ontario provide the Committee with the range of wait times for follow-up colposcopies, and compare to the benchmark and explain any material variances. **Status: To be implemented by March 2018.**	For follow-up colposcopies, the wait time benchmark for high-grade cervical lesions ranges from 14 days to 42 days from referral to initial assessment in a colposcopy clinic depending on the result of the Pap test and the type of cervical lesions, according to the Society of Canadian Colposcopists. Cancer Care Ontario noted that it was not able to calculate wait times from referral to initial assessment in a colposcopy clinic as it does not collect this data. Instead, it measures the wait time for women with high-grade cervical lesions from the date of the abnormal Pap test result to the date of the colposcopy, which it felt is a reasonable proxy but may inflate wait times by several weeks. Using this measure, Cancer Care Ontario reported that in 2014, half of the women with a high-grade abnormal Pap test waited 62 days (median) for a colposcopy, with wait times across Ontario ranging from eight days to 355 days. (Cancer Care Ontario does not measure wait times beyond 365 days because it noted that colposcopies performed more than 365 days after an abnormal Pap test may have been performed for a different indication.) Median wait times improved steadily from 2011 (71 days) to 2013 (57 days), but became worse in 2014 (62 days). Cancer Care Ontario plans to expand its collection of cervical data. As well, it plans to engage clinical and regional stakeholders to confirm cervical screening performance indicators, and then begin sharing this data with the regional cancer programs. Cancer Care Ontario expects to formally embed these indicators in its performance management process in the 2017/18 fiscal year.
Recommendation 6 Cancer Care Ontario work with the Ministry to provide the Committee with the results, LHIN (Local Health Integration Network) by LHIN, of the percentage of attachments made via Health Care Connect and Cancer Care Ontario's Contact Centre. **Status: Information provided.**	Cancer Care Ontario provided the Committee with the results of attachments made via Health Care Connect and Cancer Care Ontario's Contact Centre during the period from April 1, 2012 to December 31, 2015. In that period, of patients who had abnormal FOBT results who did not have a primary health-care provider, 94% were attached to a primary care provider through the Contact Centre and Health Care Connect. Across the 14 LHINs, attachment rate ranged from 60% (Hamilton Niagara Haldimand Brant LHIN) to 100% (eight of the 14 LHINs). For those patients who were not successfully attached to a primary health-care provider, Cancer Care Ontario follows standard operating procedures—it couriers test results to the address on file, attempts to telephone the individual three times, contacts the processing laboratory to determine if the test result was sent to a primary health-care provider, and mails a final "Attempt to Reach" letter to advise the patient to seek medical attention immediately. Cancer Care Ontario explained that the attachment process does not apply to the breast-screening and cervical-screening programs because a primary care provider or physician is directly involved throughout the screening process in these two programs. In contrast, Ontarians can obtain, complete and submit an FOBT to a laboratory for processing without having a primary care provider; therefore, this population is considered "unattached."
Recommendation 7 Cancer Care Ontario provide the Committee with international or external evidence to support its volume-based competency standard for endoscopists and colposcopists. **Status: Information provided.**	Cancer Care Ontario provided the Committee with evidence that its volume-based competency standard for endoscopists and colposcopists was derived from national and international guidelines and a systematic review of published literature. These standards are included in guideline and framework documents developed by Cancer Care Ontario's Program in Evidence-Based Care. According to Cancer Care Ontario, the Program in Evidence-Based Care is an internationally recognized guideline-development program that works to improve the quality of cancer care by helping clinicians and policy makers to apply the best scientific evidence in practice and policy decisions.

Committee Recommendation	Status Details
Recommendation 8 The Ministry provide the Committee with details of its strategy for increasing access to: • cancer screening services for individuals in rural and remote communities; • primary care providers for individuals without one. **Status: Information provided.**	The Ministry provided the following to the Committee with respect to its strategy for increasing access to cancer screening services for individuals in rural and remote communities: • The Ministry has provided the mandate and resources to Cancer Care Ontario to increase awareness about and access to screening for cancers of the breast, the colon, and the cervix through correspondence campaigns. As of May 2015, 6.6 million individuals, some of whom reside in rural and remote communities, had been targeted. As well, Cancer Care Ontario solicited physicians to participate in its "physician-linked correspondence program" in which patients receive personalized invitations from their own physicians to screen for cancer, which helps improve screening rates. • Cancer Care Ontario, in partnership with the Ministry, launched two mobile screening coaches in two LHIN areas (Hamilton Niagara Haldimand Brant and North West) to target individuals in the under/never screened and hard-to-reach populations, including First Nations and those without a primary care provider. The Hamilton Niagara Haldimand Brant coach was launched in 2013, offering breast and cervical screening in women and colorectal screening in men and women. The North West coach was launched in 1992 for breast cancer screening and subsequently expanded in 2013 to also offer cervical and colorectal screening in women. • In December 2013, Cancer Care Ontario delivered a screening activity report to the Sandy Lake First Nation community. This report is intended to help physicians who are in the patient enrolment model (physicians who are paid based on the number of patients signed up with them instead of the individual services provided to their patients) to improve cancer screening rates and appropriate follow-up. The community uses this report to support screening for colorectal cancer. By October 2016, Cancer Care Ontario plans to deliver similar reports for all three screening programs to an additional 27 First Nation communities in the Sioux Lookout area. The Ministry provided the following to the Committee with respect to its strategy for increasing access to primary care providers for individuals without one: • Following the release of the Patients First proposal in December 2015, the Ministry introduced legislation in June 2016 that would, when passed, improve access to health-care services by giving patients and their families faster and better access to care, including primary care. Changes affecting primary care from this proposed legislation include improving access to primary care for patients (such as a single number to call when they need to find a new family health-care provider close to home); improving local connections and communication between primary health care, hospitals, and home and community care to ensure more equitable access and a smoother patient experience; and providing smoother patient transitions between acute, primary, home and community, mental health and addictions, and long-term care. • The Ministry plans to redesign Health Care Connect to leverage current technologies to assist unattached patients, prioritizing the linking of complex and high-needs patients to health-care providers of their choice, close to their communities. The Ministry began the procurement process in April 2016 and expects the process to be complete by fall 2016.

Committee Recommendation	Status Details
Recommendation 9 Cancer Care Ontario provide the Committee with details on how it will support endoscopists and colposcopists who do not meet its volume-based annual standards. **Status: Information provided.**	For endoscopy, Cancer Care Ontario reported that from October 2014 to September 2015, 94.2% of hospital colonoscopies were completed by endoscopists who performed 200 or more colonoscopy procedures, compared to 93.6% in the 12-month period immediately prior. For colposcopy, Cancer Care Ontario reported that it does not currently measure colposcopists' volume, and has no formal plan to begin measuring this information. Cancer Care Ontario noted that colposcopists are expected to perform 100 or more colposcopies per year to maintain competence. To support those endoscopists and colposcopists who do not meet Cancer Care Ontario's volume-based annual standards, clinical leads in the respective areas (who are physicians themselves) support these doctors by ensuring the provision of educational opportunities based on evidence-based clinical guidelines, standards and policies of the program. The clinical leads communicate to doctors, at formal and informal venues, evidence-based clinical standards, guidelines and policies of the respective screening programs.

Chapter 3
Section
3.02

Education of Aboriginal Students

Standing Committee on Public Accounts Follow-Up on Section 4.05, *2014 Annual Report*

In November 2015, the Committee held a public hearing on our 2014 follow-up to our 2012 audit of Education of Aboriginal Students. The Committee tabled a report on its hearing in the Legislature in March 2016. The full report can be found at **www.ontla.on.ca/committee-proceedings/committee-reports/EducationAboriginalStudents**.

The Committee made six recommendations and asked the Ministry of Education (Ministry) to report back by the end of July 2016. The Ministry formally responded to the Committee on July 20, 2016. A number of issues raised by the Committee were similar to the audit observations in our 2012 audit and 2014 follow-up. The status of the Committee's recommendations is shown in **Figure 1**. **Figure 2** shows the recommendations and the status details that are based on responses from the Ministry, and our review of the information provided.

The Committee's recommendations primarily required that the Ministry provide the Committee with updated information on outcomes, Ministry processes and activities in place to improve outcomes for Indigenous students. Most of the Committee's recommendations have been fully implemented. The recommendation for the latest available results of Indigenous student achievement will be fully implemented in fall 2017 when the Ministry releases the results for the 2013/14 and 2015/16 school years (results for the 2014/15 school year were not available due to labour disruptions) in its third progress report on the Implementation of the Ontario First Nation, Métis and Inuit Education Policy Framework.

Figure 1: Status of Actions Recommended in November 2015 Committee Report
Prepared by the Office of the Auditor General of Ontario

	# of Actions Recommended	Status of Actions Recommended			
		Fully Implemented	In Process of Being Implemented	Little or No Progress	Will Not Be Implemented
Recommendation 1	1		1		
Recommendation 2	1	1			
Recommendation 3	1	1			
Recommendation 4	1	1			
Recommendation 5	1	1			
Recommendation 6	1	1			
Total	**6**	**5**	**1**	**0**	**0**
%	**100**	**83**	**17**	**0**	**0**

Figure 2: Committee Recommendations and Detailed Status of Actions Taken

Prepared by the Office of the Auditor General of Ontario

Committee Recommendation	Status Details
Recommendation 1 The Ministry provide the Committee with its most recent results of the Indigenous student achievement gap. **Status: In the process of being implemented by fall 2017.**	The educational achievement of Indigenous students is measured using the Provincial Education Quality and Accountability Office (EQAO) test results for reading, writing and mathematics in Grades 3, 6, 9 and 10. The latest publicly available results of Indigenous student achievement cover the 2011/12 school year and were included in the Ministry's 2013 Progress Report, entitled *A Solid Foundation: Second Progress Report on the Implementation of the Ontario First Nation, Métis, and Inuit Education Policy Framework*. This report contained baseline data for achievement results among self-identified Indigenous students. The Ministry advised that the results for the 2013/14 and 2015/16 school years will be published in the third progress report on the implementation framework in fall 2017. (EQAO scores for the 2014/15 school year were not available due to labour disruptions.) From the 2011/12 to 2013/14 school years, EQAO results for self-identified Indigenous students have improved in at least five of the nine EQAO assessment indicators. In addition, the gap between self-identified Indigenous students and all students combined has narrowed in at least two of the nine EQAO assessment indicators.
Recommendation 2 The Ministry provide the Committee with an update on its discussions with Aboriginal partners and other education stakeholders aimed at setting measurable student achievement targets. **Status: Fully implemented.**	The Ministry informed us that student-achievement targets for Indigenous students are the same as those for all students: an 85% high-school-graduation rate within five years of starting high school and a 75% success rate on elementary EQAO assessments. In the First Nation, Métis, and Inuit Education Policy Framework Implementation Plan, the Ministry established 10 performance measures to monitor and track progress in four priority areas: using data to support student achievement; supporting students; supporting educators; and engagement and awareness-building. The Ministry has not established targets for these performance measures. The Ministry has engaged Indigenous and education-sector partners through the Minister's Advisory Council on First Nation, Métis and Inuit Education (Advisory Council), and the Minister's Advisory Council on First Nation, Métis and Inuit Education Working Group (Working Group). According to the Ministry, the Advisory Council and Working Group provide a forum for feedback on Ministry initiatives and raise issues related to the education of Indigenous people in Ontario's publicly funded school system. They also seek to arrive at mutually acceptable solutions to support student achievement and well-being, and to help close the achievement gap. The Advisory Council had requested to be involved in the development of the Ministry's third progress report on the implementation framework. In early 2016, a subcommittee of the Working Group was created to "collect certain data and obtain input to inform the development of the third progress report and the framework implementation plan." Discussions held up to that point dealt with identification of appropriate performance measures for the framework implementation plan, information needed to assess performance measures, and possible ways to collect it.

Committee Recommendation	Status Details
Recommendation 3 The Ministry provide the Committee with a summary of its report-back processes that ensure funds are spent for their intended purposes. **Status: Fully implemented.**	Beginning in 2014, the Ministry required all school boards to develop a Board Action Plan on First Nation, Métis and Inuit Education. The objective of these plans was to identify the activities that boards would undertake to support the strategies and actions identified in the framework implementation plan. The Ministry advised that funding is provided to boards to support the activities outlined in the action plans. The Ministry provided $4.9 million in the 2014/15 school year and $5.6 million in 2015/16 to support board action plans. This funding was outside of the Grant for Student Needs (GSN), the main funding to support elementary and secondary school operations. Funding to support board action plans is flowed to boards in three instalments—60% at the time an agreement is signed, 20% when the Ministry receives and approves an interim financial report, and 20% when the Ministry receives and approves a final report. The Ministry analyzes the interim and final reports to ensure that boards are making progress toward meeting the strategies and actions identified in the action plans, and that funds are being used appropriately. In assessing the action plans, the Ministry: • ensures that interim and final reports outline in detail the activities school boards have implemented (including the dates of events, the number of participants, board and community partners, and the initiation and progress of work to date), and that spending reflects implementation and aligns with the funding provided to the boards; • reviews program indicators, outputs and evidence-based outcomes for the activities listed; • disburses payments according to the transfer-payment agreement if there is sufficient evidence that work is under way or complete, and that spending aligns with the funding provided; • may hold back or reduce payments in cases where analysis indicates that progress is not being made in accordance with the action plan and transfer-payment agreement; and • collects refund payments from boards if, upon review of final reports, the funding provided for activities outlined in action plans was not fully spent. For the 2016/17 school year, funding to support board action plans will be allocated through GSN funding. Funding for board plans totalled $6 million, and the boards will have to submit their action plans to the Ministry by September 30, 2016, their interim reports by April 28, 2017, and their final reports by August 31, 2017. Additional funding for Indigenous students is provided through a supplement to the GSN called the First Nations, Métis and Inuit Education Supplement, and through other education program grants. (See response to Recommendation 4 for a list of the supplements and other grants.) The accountability and reporting framework for the GSN requires boards to report on their intended and/or actual use of the funding in their financial submissions—estimates, revised estimates and financial statements—to the Ministry, with additional financial reporting requirements for individual supplements/grants. For example, for the Native Languages Allocation, boards report the number of elementary pupils enrolled in the program and the number of credits that secondary students take. For the First Nation, Métis, and Inuit Studies Allocation, boards report the number of credits that secondary students are enrolled for. And for the Per-Pupil Amount Allocation for 2016/17, boards will be required to show that at least $82,760 of the funding is spent on the salary and benefits of the person dedicated to support implementation of the Ontario First Nation, Métis and Inuit Education Policy Framework. They will also have to confirm that any remainder has been used to support the framework through their action plan, with any unspent funds carried forward to the following school year. In future years, it is expected that any money allocated to support the implementation of strategies and actions identified in board action plans must be spent within the school year. In addition, boards are required to report how they allocate this supplement to cover expenses, specifically reporting on how much of the funding is used for classroom expenses such as teachers, teacher assistants and textbooks, and non-classroom expenses such as co-ordinators and consultants. The Ministry uses this financial reporting to monitor how boards spend the funding to ensure it is used for intended purposes.

Committee Recommendation	Status Details
Recommendation 4 The Ministry provide a briefing note to the Committee highlighting what they believe is the funding gap between Aboriginal and non-Aboriginal students that includes both qualitative and quantitative data. **Status: Fully implemented.**	The Ministry funds school boards through several grants that take into account such unique needs as a board's demographics, individual school locations, specific program take-up, special education, and the achievement gap of both the individual board and the community profile within the board. All students in Ontario's provincially-funded school system, including Indigenous students, are funded at the same level. The Ministry also provides additional funding to provincially-funded school boards to target the specific needs and priorities of Indigenous students. Funding is delivered primarily through GSN transfer-payment agreements. Within the GSN is targeted funding, known as the First Nation, Métis and Inuit Education Supplement, to improve the achievement and well-being of Indigenous students, and to close the achievement gap between Indigenous students and all students combined. The supplement is designed to support programs for Indigenous students, as outlined in the Ontario First Nation, Métis, and Inuit Education Policy Framework. The supplement includes a component based on Indigenous identification derived from either the Census or self-identification by Indigenous students. The funding formula for the Board Action Plan Allocation was updated in 2016/17 to give greater weight to components that use voluntary, confidential Indigenous student self-identification data. In 2016/17, The Ministry also updated the Per-Pupil Amount Allocation with data from the 2011 National Household Survey. The Ministry provides additional targeted investments for the education of Indigenous students through the Education Programs–Other (EPO). Total additional funding in each of the last three years for the education of Indigenous students is summarized in the table below:

	2014/15 ($ million)	2015/16 ($ million)	2016/17 ($ million)
Funding through the Grants for Student Needs, First Nations, Métis and Inuit Education Supplement			
Native Languages Allocation	7.6	9.4	9.9
First Nation, Métis, and Inuit Studies Allocation	18.7	21.4	24.8
Per-Pupil Amount Allocation	20.8	20.6	23.4
Board Action Plans on First Nation, Métis and Inuit Education Allocation	through EPO	through EPO	6.0
Education Programs–Other (EPO)			
Board Action Plans on First Nation, Métis and Inuit Education	4.9	5.6	through GSN
Other EPO funding for Indigenous education	6.0	7.3	7.2
Total additional funding for Indigenous education	**58.0**	**64.3**	**71.3**

Committee Recommendation	Status Details
Recommendation 5 The Ministry provide the Committee with an update on its tripartite agreement discussions. **Status: Fully implemented.**	In April 2013, the Ministry established a Memorandum of Understanding (MOU) with the Nishnawbe Aski Nation and the federal government committing the parties to work together to improve educational outcomes for First Nation students in First-Nation-operated and provincially funded schools. The five priority areas established in the MOU were improving student support services, enhancing curriculum, exploring ways to improve governance and administration, enhancing human resources, and boosting parental participation. Specific activities undertaken in response to this agreement include a successful funding proposal in September 2015 for $91,000 under the Strong Schools, Successful Students Initiative of the Education Partnerships Program to support a best-practices conference; a forum to discuss leadership, board governance, student-achievement initiatives and special-education funding; a transfer-payment agreement signed in January 2016 outlining activities to be undertaken to achieve the five priority areas in the MOU; and a roundtable discussion on student transitions from remote communities, held in July 2016. In January and May of 2016, the Ministry held teleconferences with representatives of Indigenous and Northern Affairs Canada, and Grand Council Treaty #3 (GCT3) to negotiate and draft a MOU and joint action plan. Priority areas identified included establishing a GCT3-specific education resource centre; developing tuition agreements, transition plans, early-learning plans and curriculum; planning professional development opportunities; and creating linkages to the provincial education system. MOU negotiations with the federal government and GCT3 were ongoing at the time of the follow-up. The Ministry expected to have a signed MOU in place by March 2017. The Ministry is also working with the Association of Iroquois and Allied Indians to develop and finalize a MOU and Joint Action Plan. The Ministry anticipates that the MOU will be finalized and ready for signature in December 2016. Priority areas to be addressed include language and culture; relationship building; and transitions.
Recommendation 6 The Ministry provide the Committee with a summary of how the various board strategies collected by the Ministry are being used to improve educational outcomes for First Nation students transitioning to the provincial education system. **Status: Fully implemented.**	For the 2015/16 fiscal year, 40 boards identified transition programs under way in their communities, including providing dedicated staff to support transitioning students; early-years transition programs to ease kindergarten transitions; establishing elementary-to-secondary-school student mentors; and data-sharing at Native Advisory Committee meetings where students share their transition experiences. In addition, through their school-board action plans, boards report to the Ministry the evidence-based outcomes they have achieved for each of the 16 school-board strategies outlined in the First Nation, Métis, and Inuit Education Policy Framework Implementation Plan. For example, one board reported that in relation to the strategy to "increase opportunities for the participation of First Nation, Métis, and Inuit students in student voice, student engagement, and peer-to-peer mentoring activities," it provided a volunteering opportunity to 25 students from local First Nation communities to participate in a "Gathering at the Rapids" meeting in partnership with Algoma University. Another board reported that an Elder and Cultural Teachers Residence Program related to the strategy of "continuing to work with local First Nations to implement successful Education Service Agreements and to support successful transitions for First Nation students" had highly positive reviews from students and staff. Between May and June 2016, the Ministry's Indigenous Education Office hosted regional meetings with education stakeholders and Indigenous partners. These meetings provided an opportunity for boards to share best practices and lessons learned in the implementation of their board action plans.

Chapter 3
Section
3.03

Financial Services Commission of Ontario—Pension Plan and Financial Service Regulatory Oversight

Standing Committee on Public Accounts Follow-Up on Section 3.03, *2014 Annual Report*

The Committee held a public hearing in March 2015 on our 2014 audit of the Financial Services Commission of Ontario's (FSCO's) Regulatory Oversight of Pension Plans and Financial Services. The Committee tabled a report in the Legislature resulting from this hearing in June 2015. The full report can be found at **www.ontla.on.ca/committee-proceedings/committee-reports/FSCO**.

The Committee made 14 recommendations and asked that FSCO report back by the end of September 2015. FSCO formally responded to the Committee on September 30, 2015. Many issues raised by the Committee were similar to those in our audit observations in 2014, which we have also followed up on this year (see Chapter 1). The status of each of the Committee's recommended actions is shown in **Figure 1**. **Figure 2** shows the recommendations and the status details that are based on responses from FSCO, and our review of the information provided.

Figure 1: Status of Actions Recommended in November 2015 Committee Report
Prepared by the Office of the Auditor General of Ontario

	# of Actions Recommended	Status of Actions Recommended			
		Fully Implemented*	In Process of Being Implemented	Little or No Progress	Will Not Be Implemented
Recommendation 1	1			1	
Recommendation 2	1			1	
Recommendation 3	2	1		1	
Recommendation 4	1	1			
Recommendation 5	1		1		
Recommendation 6	1	1			
Recommendation 7	1		1		
Recommendation 8	1	1			

	# of Actions Recommended	Status of Actions Recommended			
		Fully Implemented*	In Process of Being Implemented	Little or No Progress	Will Not Be Implemented
Recommendation 9	3	1		2	
Recommendation 10	1			1	
Recommendation 11	1	1			
Recommendation 12	2		1	1	
Recommendation 13	4	2	1	1	
Recommendation 14	2			2	
Total	**22**	**8**	**4**	**10**	**0**
%	**100**	**37**	**18**	**45**	**0**

* Some recommendations required the Ministry and FSCO to provide information to the Committee. The cases in which the Ministry and FSCO provided the information as requested we have counted as "fully implemented."

Figure 2: Committee Recommendations and Detailed Status of Actions Taken

Prepared by the Office of the Auditor General of Ontario

Committee Recommendation	Status Details
Recommendation 1 FSCO identify strategies to help inform and mitigate financial risk of underfunded plans, including potential impact of varying levels of economic growth. **Status: Little or no progress.**	FSCO has not developed strategies or considered changes to legislation that would mitigate the financial risk to plan sponsors and members from underfunded plans. In October 2016, FSCO completed an analysis that covered changes in the funded status of plans from 1992 to 2014 and the primary factors driving the change. FSCO had intended to calculate projected underfunding levels over the following few years, based on a range of economic growth scenarios. However, FSCO's analysis of the province's GDP from 2005 to 2015 showed there was no correlation between the funded status of pension plans and economic growth.
Recommendation 2 Based on these identified strategies, FSCO provide the Ministry of Finance with recommended legislative changes. **Status: Little or no progress.**	In July 2016, the Ministry issued a consultation paper about the solvency funding framework for defined benefit pension plans. FSCO was to provide its analysis of the factors contributing to the underfunding of pension plans to the Ministry. Once the Ministry received feedback to the consultation paper from stakeholders, it planned to draft the necessary legislative and regulatory amendments. As of our follow-up, FSCO was awaiting further information from the Ministry.
Recommendation 3 FSCO complete analysis of ways to improve monitoring of the Pension Benefits Guarantee Fund, such as: • developing risk indicators for the fund; and **Status: Fully implemented.** • incorporate expanded disclosure in the financial statements of the fund to better reflect plan exposure. **Status: Little or no progress.**	FSCO completed an analysis of the legislative and procedural changes it would need to monitor the Pension Benefits Guarantee Fund's (PBGF's) exposure to potential claims and address its sustainability. In August 2016, FSCO prepared and shared with the Ministry a report with several possible enhancements to legislation, including allowing the PBGF to seek external financing to meet short-term cash flow needs, requiring parent companies of insolvent plan sponsors to provide those sponsors with financial support, and allowing the Superintendent greater discretion to order the wind-up of insolvent plans that could potentially file significant claims against the PBGF. FSCO noted that since its current financial statement disclosure for the PBGF is in compliance with accounting standards, it did not expand its disclosure in 2015 and 2016. It said it will reassess disclosure requirements on an annual basis going forward.

Committee Recommendation	Status Details
Recommendation 4 FSCO provide recommended changes to the *Pensions Benefits Act* and associated regulations based on this analysis [of the PBGF]. **Status: Fully implemented.**	As a result of the PBGF, FSCO shared its recommendations with the Ministry in August 2016. The Ministry told us it will be consulting with FSCO to ensure that possible changes to legislation would help to better manage the PBGF. The Ministry told us that this consultation is happening concurrently with the agency mandate review. The Minister of Finance appointed an expert advisory panel in early 2015 to review the mandates of FSCO, the Financial Services Tribunal and the Deposit Insurance Corporation of Ontario. The panel reviewed whether each agency's mandate aligned with the Province's goals and priorities; whether each agency was fulfilling its mandate; whether the functions of each agency could be better performed by another entity; and whether changes to the current organizational structure were necessary to improve accountability and mandate delivery. The Ministry informed us that it expects to make its final decisions about FSCO's mandate and possible changes to legislation in the fall of 2016.
Recommendation 5 FSCO identify the powers that the Office of the Superintendent of Financial Institutions has that FSCO does not, as well as differences in plan administrators' mandatory reporting, such as requiring annual actuarial reports from plans that are funded less than 120%, and provide the Committee an analysis of the risks of not having similar powers and requirements. **Status: In the process of being implemented by December 31, 2016.**	FSCO said it has started reviewing the extent of the Superintendent's powers and how they compare with those of the federal Office of the Superintendent of Financial Institutions. This analysis is expected to be completed by the end of 2016.
Recommendation 6 FSCO identify and recommend areas where monetary penalties would be effective for enforcement purposes. **Status: Fully implemented.**	In June 2015, FSCO submitted a report to the Ministry that proposed using penalties as a regulatory tool in cases of late filings and other contraventions of the *Pension Benefits Act*. The report also contained the legislative changes that would be required to impose these penalties. This report proposed fixed penalties for violations such as late or missing filings and variable penalties for all other offences. The Ministry told us that it is considering FSCO's proposed legislative changes together with recommendations from the agency mandate review. The Ministry informed us that it expects to complete this work in the fall of 2016.
Recommendation 7 FSCO provide an update on whether more examinations can be conducted with existing resources and the changes it plans to make to its examination methodology to ensure key risks are covered. **Status: In the process of being implemented by March 31, 2017.**	FSCO now considers the results of its staged monitoring process for pension plans, which was fully implemented in June 2016, in deciding which plans to examine. FSCO also updated its examination procedures for both defined-benefit and defined-contribution plans. The expanded procedures include verifying that a plan's expenses are reasonable given its total size, that permitted asset classes in which members can invest are clearly established, and which default investment options exist for members if they do not choose their own investments. These additional procedures allow FSCO to check whether plan assets have been invested in accordance with federal investment regulations and that plan members have appropriate information about the risks associated with their investments. The expanded procedures were used by FSCO to examine 55 plans in 2015/16. Further, in September 2015, FSCO retained a vendor to provide monthly data about the potential inability of plan sponsors to meet pension obligations. As of our follow-up, FSCO was assessing how to use this information as part of its existing risk analysis to identify additional plans whose members are at risk for examinations. FSCO examined 55 plans in 2015/16 and planned to examine more than 55 in 2016/17, an increase from the 50 plans examined in recent previous years.

Committee Recommendation	Status Details
Recommendation 8 FSCO complete its analysis of new information plan administrators can provide to members and make recommendations to government, as well as the new information FSCO can make public regarding its annual public reporting on pension plans. **Status: Fully implemented.**	In June 2016, FSCO reviewed statutory annual disclosure requirements in other provinces and territories, such as the United States and the United Kingdom. In October 2016, FSCO submitted to the Ministry recommendations for possible enhancements to current statutory annual disclosure requirements. Some additional disclosures recommended in the report include names and contact information of plan administrators and the earliest date plan members are eligible to retire.
Recommendation 9 FSCO work with the Ministry of Finance to identify regulatory amendments as required to ensure that: • all co-op board members have criminal checks before the co-op is registered and offering statements are issued; **Status: Little or no progress.** • all approved offering statements are listed on FSCO's website; and **Status: Fully implemented.** • FSCO conduct ongoing monitoring of co-ops. **Status: Little or no progress.**	In December 2015, FSCO submitted legislative amendments to the Ministry to help protect members and investors of co-ops. This included a legislative change to allow FSCO to conduct criminal checks of co-op board members at the licensing stage and/or before the co-op was registered or any offering statements issued. The Ministry is reviewing FSCO's recommendations and considering whether legislative changes were necessary. No date had been set for completion of this review. FSCO began posting all approved co-op offering statements receipted on or after July 1, 2016. FSCO had not committed to posting all historical approved offering statements, but said it would continue to make these available to the public upon request. A legislative change is required for FSCO to have the authority to conduct ongoing monitoring of co-ops. FSCO provided the Ministry with recommended legislative amendments in December 2015. The Ministry was reviewing FSCO's recommendations and considering whether legislative changes to the *Co-operative Corporations Act* are necessary. It had not indicated when it would decide on FSCO's recommendations. In the meantime, FSCO said it would continue to focus on verifying co-ops' information during the initial registration period.
Recommendation 10 FSCO provide the government with recommendations regarding the level of the fees it collects for reviewing co-op offering statements. **Status: Little or no progress.**	FSCO said it would be inappropriate to proceed with this recommendation during the mandate review, given the recommendation to move the oversight of co-ops away from FSCO and/or the newly proposed regulatory body. FSCO planned to begin an analysis of its costs in the co-op sector and recommend possible fee changes to the Ministry in 2017, subject to any announcement by the government on the mandate review. These announcements are expected in fall 2016.
Recommendation 11 FSCO provide an update on discussions with the Ontario Securities Commission on the benefits of sharing or transferring responsibility of reviewing offering statements. **Status: Fully implemented.**	In November 2015 and February 2016, representatives from FSCO and the Ontario Securities Commission met to conduct exploratory discussions about how a potential transfer of responsibility would be carried out. There is a standing offer in place from the Commission to assist FSCO with reviewing complex offering statements in future. However, as of our follow-up, discussions had been put on hold until FSCO received further policy direction from the Ministry. The Ministry was reviewing the recommendations made by the expert panel for FSCO's mandate review, including the recommendation about the transfer of responsibility. The Ministry expected to make its decisions from the mandate review in fall 2016.

Committee Recommendation	Status Details
Recommendation 12 FSCO provide an update on: • implementation of programs to support data-gathering, internal controls and risk assessment related to the licensing system; and **Status: In the process of being implemented by December 31, 2017.** • agreements with insurers related to receiving data on which agents have purchased errors and omissions insurance, as well as insurance that has lapsed. **Status: Little or no progress.**	FSCO has implemented several enhancements to its online licensing system: • Insurers can download a list of their sponsored agents to verify that they have valid insurance. • The system sends email reminders to agents when their insurance is about to expire or has expired. • The online system no longer has free-form fields. • There is a new comment field that publicly identifies agents whose insurance has lapsed. However, the system still does not automatically verify if errors and omissions insurance information is valid at the time it is entered by an agent; this lets agents get licences without having to meet minimum licensing requirements. FSCO was assessing whether these controls and some other process improvements it had made improved the accuracy of the errors and omissions insurance information in its database. The assessment was expected to be completed sometime in 2017. FSCO said it would then decide if any additional controls were required. FSCO staff prepared an errors and omissions insurance compliance position paper in December 2015, recommending that, before any further action was taken, the enhancements above be monitored for 12 to 18 months to see whether they were providing accurate compliance rates. The Superintendent accepted this recommendation. In 2016, FSCO assessed the feasibility of gathering information about errors and omissions claims filed against life insurance agents using data collected by the General Insurance Statistical Agency and the Insurance Bureau of Canada. FSCO found it was not feasible to use available industry data to obtain detailed information on these claims. FSCO has committed to working with insurance industry stakeholders to collect additional data in 2016/17, but it has not indicated that it will be establishing agreements with errors and omissions insurance providers.

Committee Recommendation	Status Details
Recommendation 13 FSCO provide an update on: • the implementation of its framework that documents how FSCO identifies, assesses and deploys compliance resources; **Status: In the process of being implemented by March 31, 2017.** • steps taken to monitor timeliness and outcomes of complaints and ensure holders of sanctioned licences by other regulators that also hold FSCO licences are assessed quickly; **Status: Fully implemented.** • its assessment of the need for proactive investigations in each regulated sector to allow for periodic examinations of all registrants and licensees; and **Status: Little or no progress.** • how FSCO will provide more timely publication of compliance and examination reports to the industry. **Status: Fully implemented.**	In 2016, FSCO developed the draft Market Regulation Branch's Supervisory Framework, which lays out its nine-step supervisory model and provides guidance to staff on market supervision best practices and tools. The model is intended to help FSCO develop and execute its Annual Supervisory Plan, which includes complaint resolution, desk reviews, onsite examinations, and sector reviews. The framework has been substantially implemented, and gaps were to be fully addressed by March 2017. In 2015/16, FSCO implemented monthly monitoring and reporting of complaint handling to measure whether it was meeting its targets of closing 80% of consumer complaints in 75 days and all complaints within 365 days. It found it was meeting those targets. In 2016, FSCO implemented a new process so it would receive regulatory sanction notifications from the 36 other relevant regulators in Canada. FSCO stated that through this process, it identified almost 50 sanctions against its licensees imposed by other regulators. FSCO uses monthly performance measure reporting to monitor whether these complaints are resolved in a timely manner. Since December 2014, FSCO has also signed memorandums of understanding (MOUs) with the Mutual Fund Dealers Association of Canada, the Real Estate Council of Ontario, and the Investment Industry Regulatory Organization of Canada. The purpose of these MOUs is mutual assistance and sharing of information among the regulators, including the regulatory action they may take against one another's licensees and registrants. FSCO has not assessed the need for proactive investigations in each of its regulated financial sectors. FSCO implemented risk-based supervisory approaches to improve its proactive assessment of the regulated financial services sectors. It told us it did not have sufficient staffing resources to conduct proactive investigations of all registrants and licensees in each of its regulated financial sectors. On its website, FSCO has published multiple reports regarding the overall results of its examination of regulated entities and licensed individuals, such as mortgage brokers, life insurance agents and service providers.
Recommendation 14 FSCO provide a formal recommendation on: • the transferring of some responsibility for protecting the public interest and enhancing public confidence to new or established self-governing industry associations; and **Status: Little to no progress.** • the transferring of regulatory responsibilities for regulated financial sectors to the federal Office of the Superintendent of Financial Institutions. **Status: Little to no progress.**	The expert advisory panel conducting FSCO's mandate review presented its final report to the Ministry in March 2016. It contained 44 recommendations. The overall position of the panel was that many functions performed by FSCO and DICO could be better performed by a single new and integrated entity, the Financial Services Regulatory Authority. FSCO was awaiting further direction from the Ministry regarding the transfer of its responsibilities and changes to its mandate.

Chapter 3
Section
3.04

Infrastructure Ontario—Alternative Financing and Procurement

Standing Committee on Public Accounts Follow-Up on Section 3.05, *2014 Annual Report*

The Committee held a public hearing in March 2015 on our 2014 audit of Infrastructure Ontario—Alternative Financing and Procurement. The Committee tabled a report in the Legislature resulting from this hearing in June 2015. The full report can be found at **www.ontla.on.ca/committee-proceedings/committee-reports/InfrastructureOntarioAlternativeFinancingandProcurement**.

The Committee made six recommendations and asked the Ministry of Infrastructure (called the Ministry of Economic Development, Employment and Infrastructure at the time our audit) and Infrastructure Ontario to provide the Committee with written responses to its recommendations by the end of September 2015. The Ministry of Infrastructure (Ministry) and Infrastructure Ontario formally responded to the Committee on September 30, 2015. A number of issues raised by the Committee were similar to the observations in our 2014 audit. In February 2016, our Office asked the Ministry and Infrastructure Ontario to provide an update on the status of actions taken to address the Committee's recommendations. The Ministry and Infrastructure Ontario provided us with information in the spring and summer of 2016. The updated status of the Committee's recommendations is shown in **Figure 1**.

Figure 2 shows the recommendations and the status details that are based on responses from the Ministry of Infrastructure, Infrastructure Ontario, and our review of the information they provided.

Figure 1: Status of Actions Recommended in June 2015 Committee Report
Prepared by the Office of the Auditor General of Ontario

	# of Actions Recommended	Status of Actions Recommended			
		Fully Implemented	In Process of Being Implemented	Little or No Progress	Will Not Be Implemented
Recommendation 1	2	1		1	
Recommendation 2	2	1		1	
Recommendation 3	2	2			
Recommendation 4	2	2			
Recommendation 5	1		1		
Recommendation 6	3	3			
Total	**12**	**9**	**1**	**2**	**0**
%	**100**	**75**	**8**	**17**	**0**

Infrastructure Ontario has made progress on a number of the recommendations, including reporting back to the Committee on the actual cost experience of the Alternative Financing and Procurement projects in Ontario and the details on its revised Value-For-Money assessment methodology. However, it was not able to provide data on the actual cost experience on recent public-sector procurements, and it is yet to report back on the results of the third-party review of its budget process and estimating methodology.

Figure 2: Committee Recommendations and Detailed Status of Actions Taken

Prepared by the Office of the Auditor General of Ontario

Committee Recommendation	Status Details
Recommendation 1 Infrastructure Ontario shall report back to the Standing Committee on Public Accounts a summary of its analysis into the collection of data on actual cost experience from recent public sector procurements **Status: Little or no progress.** and AFPs in Ontario. **Status: Fully implemented.**	On September 30, 2015, Infrastructure Ontario provided to the Committee two reports. The first report summarized the performance of 45 Alternative Financing and Procurement (AFP) projects and seven traditional (direct delivery) projects (with project costs between $10 million and $50 million) delivered by Infrastructure Ontario. The report noted that 98% of the AFP projects were on budget and 73% were on time compared to 71% on budget and 86% on time for the traditionally delivered projects delivered by Infrastructure Ontario. The second report reviewed five major hospital projects with capital costs in excess of $100 million that were traditionally delivered 10 years ago. Infrastructure Ontario stated that it was unable to obtain more information on recent major projects in the public sector. The report identified that the average cost overruns for these five projects were 25% when comparing costs at tender to final, and 54% when comparing budget to final. In addition, when Infrastructure Ontario provided our Office with the update on the implementation of this recommendation in April 2016, it also included a staff report from the City of Toronto on the schedule and budget reset of the Toronto-York Spadina Subway Extension, and a report issued by the Lawrence National Centre for Policy and Management on comparing P3 and Traditional Approaches. Infrastructure Ontario provided details on these projects as evidence of cost overruns in traditionally delivered projects.

Committee Recommendation	Status Details
Recommendation 2 Infrastructure Ontario shall report back to the Standing Committee on Public Accounts on details of its revised VFM assessment methodology, including what was changed, when, and why. **Status: Fully implemented.** This response must also include the extent to which the valuation of risks assumed to be retained under the AFP and public-sector delivery models are supported by actual cost experience from recent public-sector procurements and AFPs in Ontario. **Status: Little or no progress.**	Infrastructure Ontario updated its value-for-money (VFM) assessment methodology in March 2015. The updated VFM approach includes five main enhancements that are summarized as follows and described in more detail in the VFM Guide, which was provided to the Committee: • **Simplified risk matrices**—The total number of risks was reduced from approximately 60 to 40 to clarify definitions and reduce redundancies. • **Introduction of an innovation factor**—The innovation factor assumes that the base cost of the public sector comparator will be higher than the AFP model by an average of 7.5% to 12%. The innovation factor is only applied to projects that have a design component to them. • **Lifecycle cost adjustment**—The estimated lifecycle spending for the public-sector comparator has been reduced based on observations made on historical under-spending by the government to maintain assets. • **Removal of insurance costs from the calculation of competitive neutrality**—The costs of insurance premiums are included in the base cost and have been removed from the competitive neutrality amount. • **Enhancements to the risk assessment process**—Where possible, project-specific cost consultants will be requested to validate the assignment of valuations to the different risks from the risk workshop. Infrastructure Ontario has not included the extent to which the valuation of risks assumed to be retained under the AFP and public-sector delivery models are supported by actual cost experience from recent public-sector procurements in Ontario. Infrastructure Ontario said it was unable to obtain information on actual cost experience from recent public-sector procurements in Ontario.
Recommendation 3 The Ministry of Economic Development, Employment and Infrastructure shall report back to the Standing Committee on Public Accounts on its plan for the screening threshold for AFP projects. This response must • state the amount of the new screening threshold, if applicable, and provide a rationale for the change; and **Status: Fully implemented.** • provide an anticipated implementation date for any proposed changes to the screening threshold. **Status: Fully implemented.**	Since spring 2015, upon the direction of the Minister of Infrastructure, Infrastructure Ontario has been using $100 million as the threshold to identify projects for potential delivery through the AFP model. This change brings Ontario in line with other jurisdictions in Canada (e.g., PPP Canada, Partnerships BC, and SaskBuilds) that use a $100 million threshold for projects that require long-term financing through the operating and/or maintenance period of the contract. Projects under $100 million may be assessed on a case-by-case basis.

Committee Recommendation	Status Details
Recommendation 4 Infrastructure Ontario shall report back to the Standing Committee on Public Accounts with a summary of its traditionally delivered projects. This summary must • include statistics about cost overruns and project delays for these projects; and **Status: Fully implemented.** • highlight any trends in these statistics over the period from when Infrastructure Ontario first began overseeing traditionally delivered projects to the most recent projects. **Status: Fully implemented.**	Infrastructure Ontario provided the Committee with a summary table of the performance of its traditionally delivered projects over the last four years. On average, Infrastructure Ontario delivers 4,000 traditionally delivered projects a year. Of these projects, approximately 1,600 were over $100,000 and were assessed by Infrastructure Ontario for on-time and on-budget performance. The targets for these measures were on-time performance of >90% and a budget variance of +/-5%. In the last four fiscal years, from 2011/12 to 2014/15, Infrastructure Ontario's on-time performance ranged from 87% to 94.5% and its on-budget variance ranged from -0.9% to 0.9%, exceeding the targets in all cases except one instance of 87% on-time performance in 2011/12. The trend over the last four years shows improvement in performance measures, which, according to Infrastructure Ontario, can be attributed to changes in its procurement processes and revisions to the outsourcing service delivery model used for these projects.
Recommendation 5 Infrastructure Ontario shall report back to the Standing Committee on Public Accounts on the results of its third-party review of its budget process and estimating methodology **Status: In the process of being implemented by winter 2017.**	In 2015, Infrastructure Ontario retained a third-party cost-consulting firm through a competitive process to review the methodology Infrastructure Ontario uses to develop project budgets for AFP projects. The firm analyzed the budgets for 36 AFP projects with a construction value of $19.75 billion across all sectors. In addition to reviewing capital construction costs, the review analyzed the forecast accuracy of lifecycle and maintenance costs developed for budgets by Infrastructure Ontario. Infrastructure Ontario provided the Committee with the preliminary results of the review in September 2015. The final report, which Infrastructure Ontario has not provided to the Committee, was issued in March 2016. Although the report found that Infrastructure Ontario's methodology for producing budgets follows a process that is consistent with industry practices, it identified a number of areas for improvement. Specifically, the report noted that: • There continues to be room to improve budgets within the transit/transportation Design Build Finance Maintain (DBFM) portfolio. Overall budgets for projects in this portfolio appear to be conservative. • There continues to be a need for constant monitoring of industry trends in order to address any new trends. • Infrastructure Ontario should further leverage its expertise and portfolio knowledge to improve budgeting for lifecycle and maintenance costs. In response to the concerns identified in the report, Infrastructure Ontario is implementing a new project database system that will allow greater analysis and reporting on individual projects and sectors for budget development. Infrastructure Ontario anticipates this system will be implemented in the spring or summer of 2017. In addition, the budget and cost management team was restructured in 2016, with resources identified to improve the budget performance of the transit/transportation DBFM portfolio, including hiring of new personnel (a Quantitative Surveyor or Analyst) expected in the fall or winter of 2016 and the development of a new Cost Consultant Vendor of Record in winter 2017.

Committee Recommendation	Status Details
Recommendation 6 Infrastructure Ontario shall report back to the Standing Committee on Public Accounts on its competitive bidding process for AFP projects. This response must • explain how the remaining one-third of projects were chosen and how the system of scoring bidders' submissions would be modified to ensure appropriate weighting is given to both technical merits of the submission and price; **Status: Fully implemented.** • include steps taken to ensure the bidding process is a competitive one; and **Status: Fully implemented.** • include a summary of the average number of qualified bids received for AFP projects. **Status: Fully implemented.**	Infrastructure Ontario stated that all bids must meet minimum design-technical standards prior to being evaluated on price to ensure that the government or other public-sector client ultimately receives a high-quality, cost-efficient project. Historically, two-thirds of the projects have been awarded to bidders whose price is the lowest and whose design-technical score is the highest. Therefore, the remaining one-third would have been chosen based on price as long as the bidders met the minimum design-technical standards. In addition, Infrastructure Ontario undertook a review of its evaluation methodology and stated that there is currently appropriate balance to consider both technical and financial bid submissions, and it does not intend to make any major modifications to its bid scoring system. However, Infrastructure Ontario did made two adjustments to the system in 2015: • it introduced "sequential evaluation," whereby technical results are completely evaluated before any financial submissions are opened (in the past, this was done simultaneously by the technical evaluation and financial evaluation teams); and • it introduced a minimum scoring threshold in the technical submission for Build Finance projects, to further ensure that certain construction scheduling standards would be met. Infrastructure Ontario stated that its procurement process has controls and processes in place to ensure competitiveness. For instance, in some cases, prior to any procurement, "market sounding" is done to ascertain interest in particular projects and get feedback on potential transaction-structuring elements. Procurements are initiated through a Request For Qualifications phase, whereby all market competitors are open to submitting qualification submissions that meet established requirements. Only successful prequalified applicants are then invited to submit proposals in a Request For Proposals stage, which is a competitive process that also allows for commercially confidential meetings observed by fairness monitors. As well, Infrastructure Ontario has reported that, on average, its AFP projects delivered via the Build-Finance model typically involve five bids, whereas projects delivered via the Design Build Finance and Design Build Finance-Maintain models involve three bids.

Chapter 3
Section
3.05

Ornge Air Ambulance and Related Services

Standing Committee on Public Accounts Follow-Up on *March 2012 Special Report*

The Standing Committee on Public Accounts (Committee) held hearings on our 2012 Special Report titled *Ornge Air Ambulance and Related Services* in 2012, 2013 and 2014. Staff of the Ministry of Health and Long-Term Care (Ministry) and Ornge were required to give testimony on Committee questions. In June 2013, the Committee tabled an interim report in the Legislature describing issues and observations identified during the 2012 hearings. In October 2014, a second report was tabled. This second report provided an overview of the many subject areas touched on in the hearings in 2013 and 2014. It identified more than 60 "areas of concern" regarding Ornge's operations and the Ministry's oversight. The Committee planned to write a third report with recommendations to the Ministry and Ornge to address these concerns. However, the Ornge hearings were discontinued before this third report could be finalized.

Figure 1 summarizes the follow-up work we conducted to determine whether action was taken on key areas of concern that were included in the October 2014 Committee report. It includes only those concerns where action might be taken by either the Ministry or Ornge to improve a problem or issue. It therefore does not include, for example, concerns with the conduct of witnesses (such as the possibility that the information they provided was misleading or whether the parties conducted themselves in accordance with their applicable professional standards). It also excludes concerns relating to entities other than the Ministry or Ornge. For clarity, we have grouped the Committee's concerns into key areas.

Overall, we examined 44 of the "areas of concern" that were raised by the Committee and found that either the Ministry or Ornge has taken action to address 39(89%) of them, with two of them (5%) being in progress and three of them (6%) requiring further action. For example, the Ministry has not appointed members to Ornge's board, and the Ministry has not obtained staff with expertise in air ambulance services.

Figure 1: Committee Areas of Concern and Status of Actions Taken

Prepared by the Office of the Auditor General of Ontario

Area of Concern	Status
Oversight and Governance	
1. There was a lack of Ministry oversight of Ornge. (concern #5)	Action taken* In July 2012, the Air Ambulance Program Oversight Branch was established by the Ministry to provide oversight of Ornge and monitor compliance with the new 2012 performance agreement. The new performance agreement strengthened oversight by requiring more frequent reporting of results, including call volumes; allowing the Ministry to perform more inspections of Ornge, including unannounced inspections; and requiring Ornge to obtain Ministry approval prior to engaging in certain actions, such as altering its corporate structure.
2. Ministry appointments to Ornge's board of directors should clearly understand that they are the Minister's representative on the board. (concern #6)	Further action required. There is no current plan to make appointments to Ornge's board of directors. The Ministry did not appoint any representatives to Ornge's board, although it did make two appointments to board sub-committees.
3. Segregation of for-profit ventures from core service delivery is critical to protect public sector assets and service levels. (concern #7)	Action taken* In 2012, Ornge's board of directors and senior management team, who were responsible for creating profit-seeking enterprises, were replaced. The new volunteer board of directors and senior management team have worked to simplify Ornge's corporate structure by amalgamating some of the entities within their control. Although two entities within their control remain for-profit entities, they do not engage in for-profit undertakings and only deliver air ambulance and related services to Ontarians.
4. Ornge should be in compliance with all established administrative practices, including compensation levels, salary disclosure, procurement, whistle-blowing, and conflict-of-interest policies. (concern #8)	Action taken* The new performance agreement requires Ornge to comply with requirements of broader-public-sector directives, including salary disclosures and implementation of whistle-blower policies.
5. The Ministry must be aware of red flags and issues such as salary disclosure and investigations. (concern #13)	Action taken* Ornge is now required to publicly disclose salaries in excess of $100,000. Also, the 2012 performance agreement requires Ornge to immediately notify the Ministry of certain critical events, such as aviation incidents and all complaints that meet the criteria set out in the Ambulance Documentation Standards.
6. The Air Ambulance Program Oversight Branch staff lack the expertise and experience to provide effective Ministry oversight. (concern #16)	Further action required The Air Ambulance Program Oversight Branch has not been staffed with anyone with air ambulance experience and expertise, although the Ministry has access to other types of expertise, such as aviation services, from the Ministry of Natural Resources and Forestry and health services from the Public Health Division and the Chief Medical Officer Health.
7. Ornge lacked a clear conflict-of-interest policy. (concern #58)	Action taken Ornge has implemented a conflict-of-interest policy to ensure employees and board members support Ornge's interests and avoid situations where their personal interests actually or potentially conflict with the interests of Ornge.
8. Ornge should follow the Broader Public Sector Procurement Directive. (concern #60)	Action taken* The performance agreement between Ornge and the Ministry was revised in 2012 to require compliance with the Broader Public Sector Procurement Directive.

Area of Concern	Status
Conduct of Ornge's Former Board of Directors	
9. Ornge and the Ministry should take steps to retrieve funds and pursue directors who failed in their fiduciary responsibilities. (concern #26)	Action taken* Ornge is in litigation with the former President and CEO of Ornge, Dr. Chris Mazza, to recover funds. Ornge is awaiting the resolution of the Ontario Provincial Police investigation to conclude. This investigation is ongoing. No additional action has been taken against any of the other former directors.
10. The former board of directors failed to exercise its fiduciary responsibilities and provide the level of governance required to ensure air ambulance operations operated in compliance with the performance agreement. (concern #45)	Action taken* Ornge's former board of directors has been replaced.
11. Ornge was allowed to encumber the government and taxpayers with a debt offering that is ultimately a provincial responsibility. (concern #53)	Action taken* Revisions in 2012 to the Ministry's performance agreement with Ornge require Ornge to obtain the Ministry's approval prior to borrowing money or incurring debt or financial liabilities.
12. There are concerns that the marketing service agreement with AgustaWestland was done to take money out of the not-for-profit entities and give it to the for-profit entities. (concern #56)	Work in progress to address concern There is an ongoing Ontario Provincial Police investigation into financial irregularities at Ornge.
Corporate Culture	
13. There was a lack of professionalism between Ornge's former board of directors and management. (concern #29)	Action taken* Ornge's former board of directors and key senior management have been replaced.
Performance Reporting	
14. Reliable documentation was needed by the Ministry on a timely basis to assess service levels and cost-effectiveness of Ornge. (concern #1)	Action taken* Revisions to the Ministry's performance agreement with Ornge require more frequent reporting on operations, finances, labour and staffing, and legal issues, including quarterly expense reports, annual zero-based budget, and monthly reports on the number of calls serviced and percentage of calls serviced.
15. Performance measures were needed to provide standardized reporting on all aspects of Ornge's operations. (concern #2)	Further action required. There is no current plan to include a performance measure on the time to arrival at the scene or at a facility* Although many performance measures have been included in the 2012 revised performance agreement between Ornge and the Ministry, including reporting requirements to ensure medical staff are qualified, communications services are available at all times, and the availability of staffed aircrafts, no measures have been included regarding the time from when a call is initially received to when Ornge arrives on site (for emergency or urgent calls).
16. Ornge and the Ministry lacked useful and reliable data to drive evidence-based decision-making. (concern #3)	Action taken* Revisions to the Ministry's performance agreement with Ornge require more frequent reporting on operations, finances, labour and staffing, and legal issues, including quarterly expense reports, annual zero-based budget, and monthly reports on the number of calls serviced and percentage of calls serviced.

Area of Concern	Status
17. There was an absence of explicit performance service standards for areas such as paramedic qualifications for varying levels of calls. (concern #4)	Action taken Revisions to the Ministry's performance agreement with Ornge require Ornge to provide to the Ministry and publicly report an annual Quality Improvement Plan. This plan contains performance service standards including targets on the percentage of the time Ornge is able to staff two paramedics at all bases at a specific level of care.
Service Delivery	
18. The current business model of owning all aircraft directly and employing all pilots, paramedics and support staff may not be the most cost-effective model. (concern #30)	Action taken As part of its 2014-2017 strategic plan, Ornge undertook a review of its business model, which concluded that it continue with the status quo because it did not require an additional capital outlay and was evaluated as safer than the alternatives.
19. Consideration should be given to using an external base hospital for medical oversight instead of handling this internally. (concern #31)	Action taken The Ministry and Ornge considered alternative base hospital configurations and concluded that the current base hospital structure should not be changed, given that Ornge's base hospital is a member of the Ministry's medical advisory committee (providing it with access to evidence-based knowledge to develop appropriate medical directives).
20. Staffing levels may not be meeting established standards, and current training may not be ensuring the staff complement is able to perform required functions at all bases. Also, training may not be provided in a timely and cost-effective manner. (concern #32)	Action taken* Ornge's Medical Advisory Committee has standardized its internal paramedic crew staffing to provide clear standards on the level of care provided by each aircraft or vehicle based on the paramedic crew assigned to each transport. Data for its 2015/16 quality improvement plan indicated that by the third quarter of that year, Ornge was able to staff two critical-care paramedics at each base 72% of the time. Additional data for the period from January 1, 2016, to March 31, 2016, indicated that less than 1% of serviced calls required a hospital medical escort because Ornge could not meet the level of care required. Ornge also partnered with Cambrian College in 2014 to run an advanced-care paramedic training program, which reduced its internal training requirements.
21. Patient safety may have been compromised in certain cases due to the design of the AW139 helicopter medical interiors, understaffing of pilots and paramedics, and dispatch issues. (concern #34)	Action taken The medical interior was changed so that those currently installed in Ornge's AW139 helicopters meet Transport Canada requirements, as evidenced by a 2014 Transport Canada program validation inspection.
22. Inter-facility transfers may not be delivered efficiently, effectively, or on a timely basis to the satisfaction of patients and facility staff. (concern #36)	Action taken Ornge is required by the performance agreement to survey stakeholders annually. Survey results between 2012 and 2015 indicate that patients are generally happy with the overall care provided (overall satisfaction ranged between 70%–80% between 2012 and 2015). In addition, operational monitoring of inter-facility transfers occurs through the monitoring of response times, serviced and not serviced calls, and through oversight by a number of board sub-committees (such as the operations committee and quality of care committee).

Area of Concern	Status
23. Prior to Ornge, contractual arrangements with Canadian Helicopters yielded savings each year. (concern #39)	Action taken As part of its 2014-2017 strategic plan, Ornge undertook a review of its business model to determine whether it had the right number and type of aircraft. Proposals were received from four major helicopter manufacturers and three helicopter leasing companies and operators. Based on Ornge's internal analysis of proposals received, it decided to continue with the status quo business model of owning and operating a fleet of aircraft internally.
24. The current service delivery model must be reassessed. (concern #40)	Action taken As part of its 2014-2017 strategic plan, Ornge undertook a review of its business model to determine whether it had the right number and type of aircraft. Proposals were received from four major helicopter manufacturers and three helicopter leasing companies and operators. Ornge's internal analysis recommended that that it continue with the status quo business model of owning and operating a fleet of aircraft internally.
25. The AW139 medical interiors were not up to preferred standards. (concern #47)	Action taken The medical interior currently installed in Ornge's AW139 helicopters has been in use since February 2013 and meets Transport Canada requirements, as evidenced by a 2014 Transport Canada program validation inspection that found that "all areas of enterprise operation were in compliance with regulatory requirements."
26. There are concerns over the accuracy and reliability of Ornge's dispatch and reporting system, specifically its reporting on resource availability. (concern #49)	Action taken* In June 2015, Ornge implemented a new computer-aided dispatch system in order to improve its dispatch ability, reduce errors, and provide more accurate reporting. The Ontario Internal Audit Division plans to assess whether the new dispatch system ensures completeness and accuracy. A final report is tentatively scheduled for the first quarter of 2017.
27. There is unpredictability and uncertainty surrounding the functionality of the new dispatch system (given phases 2 and 3 of the three-phase rollout have yet to be developed), as well as the timeline for full implementation. (concern #50)	Action taken* The new dispatch system went live in June 2015 and is fully operational.
Standing Agreement Carriers	
28. Standing agreement carriers made numerous attempts to raise issues about Ornge to the Minister, but no action was taken. (concern #10)	Action taken Ornge meets annually with the standing agreement carriers to maintain and improve working relationships and to address any issues as they arise. In addition, the Ministry continues to monitor Ornge's oversight of its standing agreement carriers at the monthly Ornge/Ministry meetings. The Ministry had no reports of any recent complaints from Ornge's standing agreement carriers. In addition, Ornge's CEO communicated to standing agreement carriers that they have a number of avenues to raise concerns, such as meetings with the Ministry and Ornge or through the whistle-blower policy which is facilitated by an external consulting firm.

Area of Concern	Status
29. Contract negotiations with standing agreement carriers must take place in a transparent manner. (concern #42)	Action taken Ornge employs a "negotiated procurement process," whereby Ornge establishes its requirements and evaluation criteria. Submissions are then evaluated against the disclosed criteria and the highest-ranking proponent becomes the "preferred proponent," which is then given the opportunity to negotiate a final, binding contract with Ornge (the negotiation process may include negotiation of pricing). All proponents are subject to the process and the same evaluation criteria are disclosed in the RFP. Ornge will re-procure standing agreement carrier services in 2017/18 and is currently in the early stages of developing the procurement process and documents. Ornge will be procuring the services of a fairness adviser to support the process, and anticipates that there will be a negotiation stage.
30. In at least one instance, standing agreement carrier pilots did not receive proper training on the use of equipment. (concern #44)	Action taken Transport Canada Civil Aviation audits air operators via its Surveillance Program. The audits verify compliance with regulatory requirements and confirm effective systems are in place to ensure compliance on an ongoing basis. Pilot training is one aspect of these audits conducted by Transport Canada. A 2014 Transport Canada program validation inspection performed on Ornge's operations found that "all areas of enterprise operation were in compliance with regulatory requirements." Ornge has also implemented a process within the flight crew tracking program as part of its dispatch process that restricts the dispatch of a crew member if he or she does not possess the required training requirements.
31. There are concerns over the effectiveness of Ornge's communication of its whistle-blower policy. (concern #51)	Action taken Ornge issued a news release in December 2012 with details of the whistle-blower policy and also posted information about it on its public website.
Investigations, Inspections, Audits	
32. The resolution of investigations and complaints may not be conducted in a timely manner. (concern #18)	Action taken New time requirements have been set through the amended performance agreement. For example, Ornge is required to notify the Ministry of any incidents that meet pre-set criteria. When the Ministry is notified, a standard process is followed to determine if an investigation is required, including a determination of whether Ornge, the Ministry, or both will conduct the investigation. In cases where follow-up action is required, either a 10-day or 40-day time period is given to Ornge to indicate how it will take corrective action. Ornge's complaint data is overseen by the Ministry and Ornge's Operations Committee.
33. A January 2013 Transport Canada Program Validation Inspection identified a number of areas of non-compliance at Ornge. (concern #19)	Action taken Ornge provided a Corrective Action Plan to Transport Canada based on the findings of the inspection, and a subsequent letter was provided by Transport Canada indicating corrective actions were taken that addressed the issues identified.
34. Two Transport Canada inspection reports found Ornge to be out of compliance with night flight training of pilots. (concern #20)	Action taken The results of a 2014 Transport Canada program validation inspection found that "all areas of enterprise operation were in compliance with regulatory requirements." Ornge has implemented a process within the flight crew tracking program as part of its dispatch process that restricts the dispatch of a crew member if he or she does not possess the required training requirements.

Area of Concern	Status
35. Up-to-date records are needed to ensure pilots and paramedics do not exceed the maximum number of work hours allowed under Transport Canada rules. (concern #21)	Action taken Ornge has an internal system to monitor pilots' compliance with Transport Canada duty regulations. The current system, implemented in 2011, allows for the continual review of flight hours and automatically flags any flight and duty time that exceeds the maximum number of hours prior to assignment of a flight. Ornge also tracks hours worked by pilots in non-Ornge aircraft.
36. Ministry audits may be inconsistent and not conducted on a regular basis. (concern #22)	Action taken Ambulance service reviews are conducted every three years and are scheduled no less than six months prior to certificate expiry. This provides time for the review process to be completed prior to certificate renewal being issued.
37. There may still be outstanding issues from the Ontario Internal Audit Division's 2013 audit of Ornge related to board governance, compliance with directives, and Ornge's reporting to the Ministry. (concern #24)	Action taken As of October 2016, the Ministry reported that Ornge had implemented almost all of Internal Audit's recommendations, with most others to be implemented by early 2017.
38. The actual standard-of-care results are less than reported. (concern #35)	Action taken Ornge implemented a new dispatch system in June 2015 to enhance the accuracy, quality and type of data available to Ornge and ensure more accurate reporting. The Ministry's Internal Audit Division plans to assess whether the new system supports more complete and accurate reporting. A final report is tentatively scheduled for the first quarter of 2017.
Salaries and Payments	
39. Non-disclosure of salaries at Ornge should have been a red flag to the Ministry. (concern #12)	Action taken The revised performance agreement requires Ornge to comply with the *Public Sector Salary Disclosure Act*. Ornge discloses all employees who earned more than $100,000 and worked for one of their non-profit entities. Ornge's two for-profit entities that employ aviation staff are not subject to this legislation, but Ornge still publicly discloses these positions and related salaries, although these individuals' names are not disclosed.
40. Excessive compensation was paid to board members of a public sector enterprise, and apparent conflicts of interest existed. (concern #46)	Action taken The entire board of directors was replaced in 2012, and a new conflict-of-interest policy was implemented in November 2012. Ornge board members do not receive any compensation for their services. They are reimbursed for expenses incurred in accordance with Ornge's Travel, Business Expense & Hospitality Reimbursement Policy and Board Service Policy. Expenses typically include travel, accommodation and meals incurred for Ornge business purposes. The expenses paid to board members and executives are posted on Ornge's public website on a semi-annual basis. Information posted includes date of the claim, amount claimed and description of the expense in accordance with the requirements of the broader public sector directives.
Other	
41. The committee questions the integrity of Argus' business practices and ethics, and believes Ornge should reassess its business relationship with Argus. (concern #23)	Further action required Ornge informed Argus in 2012 to stop the business practice of soliciting standing agreement carriers for additional work, and Ornge is reviewing options beyond 2017 upon the expiry of their contract with Argus.

Area of Concern	Status
42. There are concerns about the effectiveness of Ornge's training model, the implications of Ornge's control over flight paramedic training, and the dependence on Ornge for training. (concern #43)	Action taken Ornge is facilitating an accelerated program for Ornge paramedics who have not yet achieved Advanced Care or Critical Care certification. In September 2014, Ornge established a partnership with Cambrian College to train paramedics to the Advanced Care Paramedic Flight level. Further partnerships are being explored by Ornge.
43. The Committee would like an update on the outstanding recommendations in the Special Report. (concern #67)	Action taken* Our follow-up on the 2012 Special Report accomplishes this.
44. Budget pressures due to financial commitments, including staff bonuses, must not compromise air ambulance core services. (concern #54)	Action taken The revised performance agreement requires that Ornge submit a zero-based budget annually, which allows the Ministry to identify and analyze detailed program expenditures to ensure that the funding provided reflects the services delivered.

* Refer to **Chapter 2**, **Section 2.02** in this Volume of our Annual Report.

Chapter 3
Section
3.06

Public Accounts of the Province

Standing Committee on Public Accounts Follow-Up on Chapter 2, *2014 Annual Report*

The Committee held a public hearing on our 2014 Chapter 2 Public Accounts of the Province in November 2015. It tabled a report in the Legislature resulting from this hearing in April 2016. The full report can be found at **www.ontla.on.ca/committee-proceedings/committee-reports/PublicAccountsoftheProvince**.

The Committee made a total of five recommendations and asked the Treasury Board Secretariat to report back on the first three recommendations by June 4, 2016, and the last two recommendations by August 3, 2016. The Deputy Minister of the Treasury Board Secretariat formally responded to the Committee for the first three recommendations on June 2, 2016, and on August 3, 2016, for the last two recommendations.

Information was provided to the Committee as requested for all five recommendations. The status of the Committee's recommendations is shown in **Figure 1**.

Figure 2 shows the recommendations and the status details that are based on responses from the Deputy Minister of the Treasury Board Secretariat and our review of the information provided.

Figure 1: Status of Actions Recommended in Committee's Report

Prepared by the Office of the Auditor General of Ontario

	# of Actions Recommended	Status of Actions Recommended			
		Fully Implemented*	In Process of Being Implemented	Little or No Progress	Will Not Be Implemented
Recommendation 1	1		1		
Recommendation 2	1	1			
Recommendation 3	1	1			
Recommendation 4	1	1			
Recommendation 5	1	1			
Total	**5**	**4**	**1**	**0**	**0**
%	**100**	**80**	**20**	**0**	**0**

* Some recommendations required the Ministry to provide information to the Committee. The cases in which the Ministry provided the information as requested have been counted as "fully implemented."

Figure 2: Committee Recommendations and Detailed Status of Actions Taken

Prepared by the Office of the Auditor General of Ontario

Committee Recommendation	Status Details
Recommendation 1 Officials provide details on the government's long-term debt reduction plan of reducing net debt-to-GDP ratio from 2013/14 levels of 38.6% to pre-recession levels of 27%. **Status: In the process of being implemented.**	The government published its fiscal plan in the 2016 Budget. It includes Ontario's plan for eliminating the deficit in 2017/18, managing the debt, and growing the economy, all of which are critical for reducing the net debt-to-GDP ratio. Debt is incurred primarily for two reasons: to finance deficits and invest in capital assets. Ontario is making public infrastructure investments of more than $137 billion over the next 10 years, or about $160 billion over 12 years, starting in 2014/15. The government's plan is to balance the annual budget and continue to make investments in capital assets, which it has indicated will add to economic growth. As GDP grows more quickly and surpluses are experienced, the net debt-to-GDP ratio will decline over time to meet the government's target. The projected date of achievement has not yet been identified.

Committee Recommendation	Status Details
Recommendation 2 Officials provide clarification and further details on measures to be taken relating to the statement that "the government is committed to eliminating the annual deficit by 2017–18." **Status: Fully implemented.**	The 2016 Budget reported that the government was projecting a deficit of $5.7 billion in 2015/16—an improvement of $2.8 billion compared to the 2015 Budget forecast. The actual deficit in 2015/16 was $5 billion. The government is projecting a deficit of $4.3 billion in 2016/17 and balanced budgets in 2017/18 and 2018/19. Supported by the outlook for continued economic growth, revenue was projected to grow by an average annual rate of 4.6% between 2014/15 and 2018/19. Program expense was projected to grow at an average annual rate of 1.9% over the 2014/15 to 2018/19 period. Ontario's plan to eliminate the deficit includes: • transforming government and responsibly managing spending; and • ensuring revenue integrity and addressing the underground economy. Further details about the plan for transforming government and responsibly managing spending include: • Program Review Savings Target—The 2014 Budget announced a program review savings target set at $250 million for 2014/15 and $500 million for 2015/16. The 2014/15 target was met, and the 2015/16 target was met. • Program Review, Renewal and Transformation (PRRT)—PRRT is helping the government achieve better outcomes while also lowering costs. PRRT will remain focused on ensuring government programs and services are effective, efficient and sustainable. • Managing Compensation—The 2015 Budget required any modest negotiated wage increases to be offset by other measures to create a net-zero outcome. Since then, net-zero outcomes have been reached in a number of key sectors, including the education sector, Ontario Public Service and provincial energy corporations. From July 2012 to February 2016, the provincial public-sector average annual wage increases averaged 0.6%, which is below the municipal (1.8%), federal (1.7%) and private sectors (1.9%) in Ontario. Further details about the plan for ensuring revenue integrity and addressing the underground economy include: • Since 2013/14, the government has made progress in fighting underground economic activities. Consultations were held with high-risk sectors, with a view to partnering with industry and gaining insight into how best to tackle the underground economy. Through ongoing enhanced compliance-focused measures, including those that address underground economy activity in high-risk sectors, Ontario has generated over $930 million to date—a $330 million increase over the amount reported in the 2015 Budget. The Province required corporations to demonstrate compliance with federal and provincial taxes before receiving government procurement contracts. Since February 2014, the government has verified compliance for more than 2,200 contracts. The *Taxation Act, 2007*, was amended to make the sale, use or distribution of electronic sales suppression devices an offence. • The Province is continuing to focus on underground economy activities in all high-risk sectors, and will continue to take concrete action to better support consumer and worker safety, as well as provide a level playing field for businesses. • The Province is prepared to launch specialized audit teams to focus on sectors that are at high risk of underground economic activity, in partnership with the Canada Revenue Agency.

Committee Recommendation	Status Details
Recommendation 3 Officials provide supporting data confirming that average annual growth in program spending has been held to 1.4% less than the rate of inflation. **Status: Fully implemented.**	This is a reference to the 2010/11 and 2014/15 period. As outlined on pages 286 and 287 of the 2016 Budget, 2010-11 actual program expense was $111,706 million, and 2014-15 actual program expense was $118,225 million. This represents an increase of 1.4% per year (where growth rate is calculated using the standard compound average growth rate formula). This increase of 1.4% per year is less than the rate of inflation, which averaged 2.0% over the 2010–14 period (per Statistics Canada CANSIM table 326-0021).
Recommendation 4 Officials provide an update on specific impacts of removing the debt retirement charge from residential users' electricity bills after December 31, 2015. **Status: Fully implemented.**	Prior to eliminating the Debt Retirement Charge (DRC) for residential users on January 1, 2016, the DRC provided annual revenues of about $950 million from residential and industrial users to the Ontario Electricity Financial Corporation (OEFC). The revenues of OEFC are consolidated into Public Accounts. Residential users account for about a third of electricity consumption subject to the DRC. Therefore, on an annualized basis, the direct DRC revenues forgone from removing the DRC cost from residential bills is estimated to be over $300 million. The projected amount of DRC revenue in 2016/17 in the 2016 Budget is $625 million.
Recommendation 5 Officials provide an update on what impact the *Budget Measures Act, 2015* may have on the residential stranded debt as it relates to calculating and repaying this debt. **Status: Fully implemented.**	The *Electricity Act, 1998* was amended by the *Budget Measures Act, 2015* providing for a fixed legislative end date for the Debt Retirement Charge (DRC) for industrial, commercial and all other users of electricity. Previously, under the *Electricity Act*, DRC would have ended when the residual stranded debt was determined to be retired. As the purpose for calculating the residual stranded debt was eliminated with the introduction of a fixed legislative end date for the DRC, all reference in the *Electricity Act* to the "stranded debt" and "residual stranded debt" were removed with the amendments enacted with the *Budget Measures Act, 2015*. This included the removal of the requirement to determine (that is, calculate) the residual stranded debt from time to time and the regulation-making authority for O. Reg. 89/12—rendering the regulation obsolete. Even with the legislated end date to the DRC, stranded debt continues to exist. Under the *Electricity Act*, the Ontario Electricity Financial Corporation (OEFC) continues to have a requirement to provide an Annual Report, including annual financial statements, which include the annual update of its "unfunded liability" (sometimes called the "stranded debt"). This provides transparency on OEFC's revenues (including the DRC) and costs, and progress on pay-down of stranded debt. OEFC's annual financial statements are published in Volume 2 of Public Accounts. Following the end of the DRC, under the *Electricity Act*, OEFC continues to receive other dedicated revenues, such as payments in lieu of taxes from OPG and municipal electricity utilities, the provincial portion of corporate income taxes from Hydro One, and the Gross Revenue Charge (portion related to property taxes on hydro-electric stations), toward servicing and paying down its debt and other liabilities.

Chapter 3
Section
3.07

Smart Metering Initiative

Standing Committee on Public Accounts Follow-Up on Section 3.11, *2014 Annual Report*

The Committee held a public hearing in May 2015 on our 2014 audit of the Smart Metering Initiative. It tabled a report in the Legislature resulting from this hearing in November 2015. The full report can be found at **www.ontla.on.ca/committee-proceedings/committee-reports/SmartMeteringInitiatve**.

The Committee made eight recommendations and asked the Ministry of Energy (Ministry), the Ontario Energy Board (OEB) and the Independent Electricity System Operator (IESO) to report back by the end of March 2016. The Ministry, the OEB and the IESO formally responded to the Committee on March 22, 2016, on March 23, 2016, and on March 14, 2016, respectively. A number of issues raised by the Committee were similar to the observations we made in our 2014 audit. The status of the Committee's recommendations is shown in **Figure 1**.

Figure 2 shows the recommendations and the status details that are based on responses from the Ministry, the OEB and the IESO, and our review of the information they provided.

Figure 1: Status of Actions Recommended in November 2015 Committee Report
Prepared by the Office of the Auditor General of Ontario

	# of Actions Recommended	Status of Actions Recommended			
		Fully Implemented*	In Process of Being Implemented	Little or No Progress	Will Not Be Implemented
Recommendation 1	1				1
Recommendation 2	1	1			
Recommendation 3	2	2			
Recommendation 4	1	1			
Recommendation 5	1	1			
Recommendation 6	2	1		1	
Recommendation 7	1	1			
Recommendation 8	1	1			
Total	**10**	**8**	**0**	**1**	**1**
%	**100**	**80**	**0**	**10**	**10**

* Some recommendations required the Ministry/IESO/OEB to provide information to the Committee. The cases in which they provided the information as required we have counted as "fully implemented."

Figure 2: Committee Recommendations and Detailed Status of Actions Taken

Prepared by the Office of the Auditor General of Ontario

Committee Recommendation	Status Details
Recommendation 1 The Ministry review the role of the OEB as an independent regulator when ministerial directives that impact electricity rates are issued and report back to the Committee on its results. **Status: Will not be implemented.**	The Ministry did not review the role of the OEB as an independent regulator when ministerial directives that impact electricity rates are issued. The *Energy Statute Law Amendment Act, 2016*, proclaimed into force on July 1, 2016, changed the electricity planning process in Ontario. Under the new legislation, the Ministry is responsible for developing and updating Long-Term Energy Plans for Ontario while the OEB is responsible for preparing an implementation plan when the Ministry requests it. Although the new long-term energy planning process includes a role for the OEB in facilitating the implementation of the Long-Term Energy Plan objectives, it does not enable OEB to review and approve the Ministry's plans as an independent regulator.
Recommendation 2 The Ministry should work with the OEB and report back to the Standing Committee on Public Accounts on its completed review of TOU pricing design. **Status: Information has been provided.**	The OEB completed its review of the electricity price plan including time-of-use (TOU) pricing design and released a report on November 16, 2015, which outlined a multi-year plan in five action areas. These actions include: 1. updating the pricing plan's objectives, including a greater focus on peak demand reduction; 2. improving consumers' understanding of the TOU program and how to effectively respond to TOU pricing; 3. conducting pricing pilots to determine an optimal pricing structure; 4. engaging low-volume business consumers to discuss TOU concerns; and 5. working with the government to reduce regulatory barriers that limit OEB's ability to change the TOU periods and the allocation of the Global Adjustment. The OEB has already incorporated new objectives into its pricing plan (action 1). It is currently in the process of implementing the remaining four actions. For example, the OEB issued a request for proposals to retain a consultant to assist with the redesign of its consumer website to help consumers better respond to pricing signals and manage their energy consumption. The OEB also engaged an internationally-recognized expert to help set up pricing pilots to assess options for new TOU designs. The OEB estimated that it will take about three to five years to fully implement all five actions.
Recommendation 3 The OEB shall report back to the Standing Committee on Public Accounts on the most recent results of its consumer research program. This response must include results on: • consumer awareness with respect to TOU; • consumer response to TOU pricing. **Status: Information has been provided.**	The OEB commissioned a consumer researcher to gather evidence on consumer awareness about TOU. Key findings from the consumer research, completed in January 2015, were as follows: • consumers have a moderate level of awareness of the TOU program; • residential and business consumers displayed confusion and a lack of understanding about the electricity system in Ontario; • many consumers do not understand the charges on their electricity bills; • beyond knowing the names of the TOU periods, consumer awareness falls off drastically; and • even consumers who are aware of TOU pricing may still not understand when and how it operates or what behaviours are necessary to reduce their electricity bills. The OEB also commissioned a review to assess the ways in which consumers are, and are not, responding to the current TOU pricing structure in Ontario. Key findings from the December 2014 report included: • the perceived or actual monthly savings accrued as a result of shifting consumption behaviours may not be enough of an incentive to warrant sustained behaviour change; • the behaviours required to shift from high- to low-peak hours are perceived as being too complex and time consuming; and • automatic or routine behaviours are hard to change—even those who understand TOU pricing and intend to shift their consumption behaviour may not end up doing so because of scheduling hassles.

Committee Recommendation	Status Details
Recommendation 4 The Ministry shall work with the OEB and report back to the Standing Committee on Public Accounts on how to improve the structure and presentation of customers' bills. **Status: Information has been provided.**	The OEB identified a number of ways to improve the structure and presentation of customers' bills. By October 2018, the OEB intends to make recommendations on how to make electricity bills easier to understand. The OEB also intends to undertake various pilots and assess mechanisms such as: • re-naming the TOU time periods; • re-designing the visual presentation of TOU time periods; • modifying the overall presentation of the bill; and • providing better information on different household appliances, such as the amount of electricity the appliance consumes, the cost of that electricity, and how use and costs can be managed under TOU pricing. The OEB has limited ability to mandate changes to the electricity bills of low-volume consumers because they are governed by Ontario regulations. The OEB intends to use the results of the pilots mentioned above to develop recommendations for changes to electricity bills. The OEB has also engaged in discussions with its new Consumer Panel to get feedback on how it can make electricity bills more user-friendly.
Recommendation 5 The OEB shall report back to the Standing Committee on Public Accounts on its review of consumer complaints at Hydro One. **Status: Information has been provided.**	The OEB reported that the root causes of increased consumer complaints to Hydro One were billing issues that arose from Hydro One's new customer information system and its metering communication network. The OEB required Hydro One to develop plans and take corrective actions to fix the technical issues affecting its customer billing system and the smart-meter network. The OEB also required Hydro One to respond to all complaints within 10 business days, instead of the previous standard of 21 days. The OEB instructed Hydro One to stop all collection activities in cases that involved billing accuracy complaints, including late payment charges and disconnections, and to stop referring those accounts to collection agencies. The OEB has been holding regular bi-weekly meetings with Hydro One to ensure Hydro One is complying with the requirements above. The OEB reported that Hydro One returned to normal collection operations in mid-2015.
Recommendation 6 The Ministry shall report back to the Standing Committee on Public Accounts on: • its completed business case concerning costs, benefits, and implementation considerations of access to electricity usage data; **Status: Fully implemented.** • its efforts to reduce duplication of the processing costs of smart-meter data. **Status: Little or no progress.**	On October 15, 2015, at the Ministry's request, the IESO (in conjunction with the Advanced Energy Center) completed a business case for a project that allows access to electricity usage data to help the Ministry make informed decisions on energy policy, infrastructure planning and conservation programs. According to the business case, the potential benefits of the new data project will outweigh its potential costs. The business case also included an implementation plan which outlined several considerations, including ways of ensuring privacy and security of customer information. However, at the time of this follow-up, the Ministry had put implementation on hold until the IESO finished work on the provincial data system to collect additional information, such as postal code and occupancy change data in a non-personal manner. We found that the Ministry has made little progress in reducing the duplication of smart-meter processing costs. Specifically, the Ministry was unable to provide assurance that ratepayers are not paying for duplication of processing costs on smart-meter data. The Ministry indicated that the IESO has the exclusive authority to conduct validation, estimating and editing services for smart-meter data. If local distribution companies are duplicating the functionalities of the provincial data centre, they are acting contrary to government regulation. We noted that a large local distribution company with about 700,000 smart-meter customers (the same distribution company we identified in our 2014 report) was not transmitting any data to the provincial data centre although its customers were still being charged the monthly 79¢ Smart Metering Charge to recover the costs for doing so. This company has obtained approval from the OEB to fully integrate with the provincial data centre and has agreed to start using the provincial data centre to process TOU bills by September 2017. However, we noted that the amount collected from this company's customers for the provincial data centre the company had yet to start using totalled $20.9 million as of mid-2016 (up from $7.7 million at the time of our 2014 audit).

Committee Recommendation	Status Details
Recommendation 7 The IESO shall provide the Standing Committee on Public Accounts a list of the functions that the IESO has exclusive authority over that are fulfilled by the provincial data centre. **Status: Fully implemented.**	The IESO provided the Standing Committee on Public Accounts with the requested list of functions. According to Ontario Regulation 393/07, the IESO has the authority to: • collect, manage and store meter data; • perform validation, estimating and editing activities to identify and account for missed or inaccurate meter data; • operate one or more databases to facilitate collecting, managing, storing and retrieving meter data; and • prepare data that is ready for use by distributors to bill ratepayers.
Recommendation 8 The IESO shall report back to the Standing Committee on Public Accounts on steps it has taken to strengthen cybersecurity (i.e., use of encryption, etc.) with respect to smart-meter data at both the provincial data centre and locally with the LDCs. **Status: Information has been provided.**	The IESO and the Information and Privacy Commissioner of Ontario jointly developed a privacy and security framework for the provincial data centre. This framework includes steps to ensure that only local distribution company users and their authorized third-party vendors are able to retrieve smart-meter information. In November 2015, the IESO received its sixth consecutive annual clean audit. The audit, by an independent external audit firm, examined the Meter Data Management and Repository's operations, processes and procedures. The audit confirmed that appropriate controls are in place at the IESO. It also specified the controls that should be in operation at local distribution companies to prevent and detect unauthorized access to smart-meter data. The IESO also recently introduced the following new measures to help local distribution companies manage their users' access to the provincial data centre: • Distribution companies must respond to a security question they have previously created when requesting the IESO to grant a new user access to the provincial data centre. • Distribution companies must review their users' accounts annually and notify the IESO of any changes required in a timely manner. • The IESO conducted two webinar sessions to educate distribution companies about their responsibilities for establishing security controls within their own organizations to complement those in place at the IESO. Although only 14 people attended, the webinars were recorded and are available at any time to local distribution companies through the Smart Metering Entity's secure online information centre.

Chapter 3
Section
3.08

University Undergraduate Teaching Quality

Standing Committee on Public Accounts Follow-Up on Section 4.11, *2014 Annual Report*

In April 2015, the Committee held a public hearing on our 2014 follow-up to our 2012 audit of University Undergraduate Teaching Quality. The Committee tabled a report on this hearing in the Legislature in June 2015. The full report can be found at **www.ontla.on.ca/committee-proceedings/committee-reports/UniversityUndergraduateTeachingQuality**.

The Committee made five recommendations and asked for a report back by the beginning of October 2015 from the Ministry of Training, Colleges and Universities (now the Ministry of Advanced Education and Skills Development), and the three universities we examined in our audit and follow-up: the University of Toronto, the University of Ontario Institute of Technology, and Brock University. The Ministry formally reported back to the Committee on October 1, 2015, and included responses from the three universities. The Committee raised a number of issues similar to observations we made in our audit and follow-up. In February 2016, our Office asked the Ministry and the three universities to provide an update on the status of actions taken to address the Committee's recommendations. The updated status of the Committee's recommendations is shown in **Figure 1**.

Figure 2 shows the recommendations and the status details that are based on responses from the Ministry and the three universities, and our review of the information they provided.

Figure 1: Status of Actions Recommended in the Committee's Report
Prepared by the Office of the Auditor General of Ontario

	# of Actions Recommended	Status of Actions Recommended			
		Fully Implemented	In Process of Being Implemented	Little or No Progress	Will Not Be Implemented
Recommendation 1	1		1/3	1/3	1/3
Recommendation 2a	1			2/3	1/3
Recommendation 2b	1	1/3	1/3		1/3
Recommendation 3	1	1			
Recommendation 4	1		1		
Recommendation 5	1	1			
Total	**6**	**2 1/3**	**1 2/3**	**1**	**1**
%	**100**	**39**	**27**	**17**	**17**

At the time of our follow-up, two-thirds of the Committee's recommended actions had either been implemented or were in the process of being implemented. This included recommendations made to the Ministry to identify effective tools for measuring employment and education outcomes for university graduates, and making employment outcome data by program and university publicly available. All three universities were providing feedback to full-time faculty on their teaching performance. Both the University of Toronto and the University of Ontario Institute of Technology had made progress in implementing 75% of the recommended actions, while Brock University had made progress in implementing only 25%.

Three of the recommended actions will not be implemented by all three universities. The University of Ontario Institute of Technology would not be making the results of student course evaluations available to other students because the collective agreements with faculty would not permit it. In addition, the university believes the publication of student course evaluations would damage faculty relations while failing to improve teaching quality. Brock University did not intend to implement mandatory performance appraisals of sessional instructors because they had few sessional instructors (less than 14%), nor to examine the impact of sessional instructors on teaching because course evaluations were the property of faculty.

Figure 2: Committee Recommendations and Detailed Status of Actions Taken

Prepared by the Office of the Auditor General of Ontario

Committee Recommendation	Status Details
Recommendation 1 Universities continue to take steps to make the results of course evaluations available to students to assist them in making their course selections. **Status: University 1 in the process of being implemented by 2019/20; University 2 will not be implemented; University 3 little or no progress.**	**University of Toronto** The university developed a new online system used by the majority of faculties to share their course-evaluation results. The university advised that 84% of all undergraduate and graduate students are enrolled in a faculty that has implemented the system, and so can access the course evaluations online. One campus at this university continues to post its course-evaluation results online through its student website, as it did under a previous course-evaluation system. The projected timeline for implementation across all faculties is the end of the 2019/20 academic year. **University of Ontario Institute of Technology** The university advised that this recommendation would not be implemented because almost 98% of courses have positive reviews, 40% of courses are offered only once per year, and only 20% of courses have more than one instructor. In addition, the university believes publication of student course evaluations would damage faculty relations while failing to improve teaching. In addition, changes in the availability of student evaluations would have to be negotiated with faculty unions. **Brock University** The university is not able to provide the results of student evaluations to students because the current collective agreement between faculty and the university stipulates that course evaluations are the property of faculty members. The current collective agreement expires in June 2017, and the university said it may then consider renegotiating this provision.

Committee Recommendation	Status Details
Recommendation 2a Universities conduct performance appraisals of sessional instructors; and **Status: Universities 1 and 2 little or no progress; University 3 will not be implemented.**	**University of Toronto** The collective agreement gives university departments the option to conduct performance appraisals of sessional instructors once per term for each course, using methods deemed appropriate by the Dean. These include a classroom visit after advance notice to the sessional instructor. Otherwise, only sessional instructors looking for advancement undergo a mandatory performance appraisal, which includes the Advancement Committee observing the instructor in the classroom. The university was unable to provide the number and percentage of sessional instructors given performance appraisals in the last year because the information was kept in the various departments and not tracked centrally. **University of Ontario Institute of Technology** The collective agreement includes provisions allowing Deans to conduct performance appraisals of sessional instructors during the instructor's first teaching term, and periodically thereafter, for the purpose of assessing performance, ensuring quality, and providing the instructor with constructive feedback. The university was unable to provide the number and percentage of sessional instructors receiving performance appraisals because it does not collect such data. It also indicated that the performance appraisal of sessional instructors is a process managed by Deans, who have discretion over the timing, nature, and frequency of evaluations. **Brock University** The university informed us that it has no formal process in place to evaluate sessional instructors. The collective agreement requires only faculty members holding tenured or tenure-track positions to undergo an annual performance appraisal. The university also informed us that, in evaluating an applicant's qualifications for a sessional appointment, it deems performance in a previous appointment at the university satisfactory if no written performance evaluation to the contrary exists, or if no performance evaluation has been conducted. The university was unable to provide the number and percentage of sessional instructors receiving performance appraisals because they do not keep this data centrally. The university does not intend to implement mandatory performance appraisals of sessional instructors or include them in the next round of negotiations with its faculty union. It argues that the majority of its instructors are evaluated since its collective agreement limits the percentage of courses that can be taught by non-tenured or tenure-track faculty to 14%.

Committee Recommendation	Status Details
Recommendation 2b Examine the impact on teaching quality of the use of sessional instructors. **Status: University 1 in the process of being implemented by the end of 2016; University 2 fully implemented; University 3 will not be implemented.**	**University of Toronto** The university advised that it believes an enhanced analysis of course-evaluation data would help faculties and departments assess the impact of different delivery options on student learning (including the use of sessional instructors). Thus, it plans to build upon its existing analytic capacity through improved data-management systems. The university is currently working to develop a suite of customizable reporting tools to support enhanced institutional analysis at the faculty, department, program, and instructor level, and enhance reporting functions for the purpose of making more informed assessments of teaching quality and curricular development. Access to the new system will be granted to senior administrators in all academic divisions, and to administrative and teaching support offices engaged in the evaluation and support of professional development for the university's teaching staff. **University of Ontario Institute of Technology** The university advised that the performance of sessional instructors is reported and reviewed by the Dean, who compares aggregated scores for the entire university and the home faculty. Data is arranged chronologically and by subject, and the Dean assesses changes over time and identifies potential issues requiring follow-up action. The university advised that the majority of courses receive positive evaluations, with only 2% of courses offered in 2015/16 receiving negative evaluations. According to the university, certain programs such as education, nursing, and commerce benefit from greater reliance on sessional instructors because contact with professionals in practice is a key feature of the teaching methodology. For these programs, the university found that instructors in 2014/15 and 2015/16 received consistently high ratings. The university also said it has no evidence that students are less satisfied with sessional instructors than full-time instructors. **Brock University** The university has no plans to address this part of the recommendation. It advised that, although the impact on teaching quality of the use of sessional instructors could be assessed by comparing student course evaluations of sessional instructors with those of full-time tenured faculty, the student course evaluations of full-time tenured faculty are the property of the instructor. The university therefore does not have access to those course evaluations.

Committee Recommendation	Status Details
Recommendation 3 Universities provide substantive feedback to full-time faculty on teaching performance, and encouragement to improve teaching performance where warranted. **Status: All three universities fully implemented.**	The process to provide substantive teaching-performance feedback to full-time faculty, and to encourage teaching improvement where warranted, is generally the same at all three universities. Each requires full-time faculty to submit an annual activity report to their Dean or Chair/Director that details their activities and accomplishments during the year, supported by evidence such as teaching portfolios, student course evaluations, curriculum development, and any other evidence of teaching effectiveness. The Dean or Chair/Director then reviews and evaluates these submissions, and provides feedback to faculty. The University of Toronto and the University of Ontario Institute of Technology stated that they provide written feedback to all assessed faculty, while Brock University provided written feedback only to those whose performance is not consistent with expectations of the collective agreement. Where issues are identified, each university can recommend remedial action to faculty members to help improve their performance. Remedial action generally consists of referral to the university's teaching support institution (such as the Centre for Teaching Support and Innovation at the University of Toronto, the Teaching and Learning Centre at the University of Ontario Institute of Technology, and the Centre for Pedagogical Innovation at Brock University) which provides observation and consultation of teaching performance, and workshops on curricular development and course design. In addition, Deans or Chairs/Directors can provide suggestions to faculty regarding reading material, online resources, and sharing of best practices from their own experience. They can also provide mentorship from a senior faculty member.
Recommendation 4 The Ministry of Training, Colleges and Universities identify effective tools for measuring employment and further education outcomes for graduates of Ontario universities. **Status: In process of being implemented by the end of 2017.**	The Ministry has pursued a number of initiatives to improve the measurement of student outcomes, and has taken steps to make more information available to students to help them make well-informed decisions about their education. These initiatives include: **The Ontario University Graduate Survey** Since our 2012 audit, the Ministry has expanded collection and publication of student outcome data through the Ontario University Graduate Survey. This survey publishes provincial results on salary, relatedness between field of study and employment, full-time versus part-time employment, and level of education required for employment. The Ministry expects to introduce a new pilot survey for those completing graduate programs, such as Masters and PhDs, in fall 2017. The survey will collect information on multiple graduating classes and include questions regarding employment outcomes, program and university satisfaction, occupation and salaries, career pathways, overall experience, and learning outcomes. The Ministry plans to release the results of the pilot survey by the end of 2017. **The Ontario Education Number** The Ministry advised that it continues to work with Ontario's publicly-assisted post-secondary institutions to implement the Ontario Education Number (OEN), a unique identifier assigned to each student by the Ministry of Education since 2003 to track students from junior kindergarten to grade 12. In 2012, publicly-funded post-secondary institutions began assigning OENs to their students who did not have one coming out of grade 12, such as students from out-of-province. Recent university enrolment reports have OENs for 99% of full- and part-time enrolment at both the undergraduate and graduate levels. The Ministry is now supporting the University Data Consultation Working Group, which is expected to help inform future directions on how this information can be used to measure employment and further education outcomes for university graduates.

Committee Recommendation	Status Details
Recommendation 5 The Ministry of Training, Colleges and Universities make data on graduate employment outcomes at the program and university level publicly available to assist students in making informed decisions on university and program selection. **Status: Fully implemented.**	**Ontario University Graduate Survey** In February 2015, the Ministry published additional graduate employment outcomes data from the Ontario University Graduate Survey conducted in spring 2014. The Ministry published new indicators with accompanying results and additional information not publicly available in prior years. New indicators and accompanying results published included: • part- and full-time employment rates by university; • salaries for part- and full-time employment; • relatedness of graduates' work to both skills acquired and subjects studied (for part- and full-time employment); • percentage of graduates in unpaid internships; and • graduate occupations by the National Occupational Classification coding for graduates' outcomes. New information made available included: • question-by-question breakdown of responses to the survey; and • co-op and non-co-op graduate outcomes on employment status, full- or part-time employment, salary, and relatedness. In addition, the public website for all university key performance indicator data was changed in April 2015 to **www.ontario.ca/universityoutcomes** to simplify public searches and increase access to posted Ministry information. All employment data is as of six months after graduation. At the time of our follow-up, the latest graduate employment rates were for the 2012 graduating class, who had been surveyed in 2014/15.